DOCUMENT RESUME

ED 361 244 SO 022 906

AUTHOR Istance, David
TITLE High-Quality Education and Training for All.
INSTITUTION Organisation for Economic Cooperation and Development, Paris (France).
REPORT NO ISBN-92-64-13778-5
PUB DATE 92
NOTE 152p.; Material presented at the Ministerial level meeting of the Organisation for Economic Cooperation and Development Education Committee (Paris, France, November 13-14, 1990).
AVAILABLE FROM OECD Publications and Information Centre, 2001 L Street, N.W., Suite 700, Washington, DC 20036-4910.
PUB TYPE Collected Works - Conference Proceedings (021) -- Reports - Descriptive (141)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Educational Policy; Elementary Secondary Education; Foreign Countries; Global Approach; Higher Education; *International Cooperation; *Lifelong Learning; *Teacher Characteristics; *Teachers; Vocational Education
IDENTIFIERS Europe; North America; Organisation for Economic Cooperation Development; Pacific Region

ABSTRACT

The text of this report concentrates on areas of policy responsibility that are within the ambit of education authorities of the member countries of the Organisation for Economic Cooperation and Development (OECD). An underlying argument throughout is that OECD countries must become "learning societies" embracing all forms of education and training if they are to meet the challenges of the 21st century. Education must be of high quality not just in regular schools but also in the vocational and higher education institutions and in the training provided by public bodies and private enterprises. The OECD countries cannot afford to allow a large pool of their potential talent to lie unexploited. Education and training should be available widely and enjoyed recurrently throughout each person's lifespan. Both initial and recurrent education must be reinforced. The rapidity of structural and technological change and the decline of unskilled and semi-skilled work call for the continual renewal of knowledge and skills. The report argues that the 1990s should be a decade when substantial efforts are made to meet the learning needs of all, which implies giving priority to those who benefit least from education and training. The report is divided into three parts: (1) the ministerial debate on high quality education and training for all; (2) the analytical background; and (3) a statistical overview. The second section includes issues of economic and societal change, educational quality, and problems facing teachers such as shortage of personnel, decline of professionalism, and the increasing demands placed upon them. (DK)

ED 361 244

HIGH-QUALITY EDUCATION AND TRAINING FOR ALL

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

J. R. WEST

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

SO 022 906

OECD

OCDE

PARIS 1992

BEST COPY AVAILABLE

50

HIGH-QUALITY EDUCATION AND TRAINING FOR ALL

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971) and New Zealand (29th May 1973). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié en français sous le titre

UNE ÉDUCATION ET UNE FORMATION
DE QUALITÉ POUR TOUS

© OECD 1992
Applications for permission to reproduce or translate all or part of this publication should be made to:
Head of Publications Service, OECD
2, rue André-Pascal, 75775 PARIS CEDEX 16, France

FOREWORD

The OECD Education Committee met at Ministerial level at the Organisation's headquarters on 13-14 November 1990 on the theme "High-Quality Education and Training for All". Mr. Javier Solana Madariaga, Minister of Education and Science, Spain presided over the meeting and the Vice-Presidents were Mr. Lauro F. Cavazos, Secretary for Education, United States and Mr. Göran Persson, Minister for Primary, Secondary and Adult Education, Sweden. The day prior to the meeting they held discussions with the Organisation's Business and Industry, and Trade Union Advisory Committees – BIAC and TUAC – who had prepared a special joint statement for the occasion, included as an annex to this volume. This publication presents the main documentation prepared for that meeting, updated with findings and statistical data that have become available in the course of 1991, and includes a chapter summarising the main points raised in the Ministers' discussion.

The overall theme, "High-Quality Education and Training for All", encapsulates the scale of the challenges and the need for bold visions for education, at the threshold of the twenty-first century. The forward-looking review of education and training policies, and their interaction with the economy and society more broadly, proved to be especially valuable in the light of the widespread changes currently taking place throughout the OECD countries and in the rest of the world. The emphasis on quality underlines the key role that learning plays in sustaining economic, social, cultural, and political well-being. That learning of quality should be "for all" is to recognise that education is a corner-stone of participation in our societies.

The meeting was the first of a series of three meetings at Ministerial level to be held in the Directorate for Social Affairs, Manpower, and Education. The Employment, Labour, and Social Affairs Committee is meeting at Ministerial level on 14-15 January 1992 to discuss labour market issues, and later in December that year to consider social policy questions. Together, they represent the search for coherence of purpose and, where appropriate, concerted strategies between these different policy spheres.

Within the Secretariat, the author of the background documentation and other reference material is David Istance, until recently of the Education and Training Division in the Directorate for Social Affairs, Manpower, and Education.

The report is published on the responsibility of the Secretary-General.

ALSO AVAILABLE

Adult Illiteracy and Economic Performance (1992) (96 91 03 1) ISBN 92-64-13597-9	FF95	£13.00	US$24.00	DM39
Education in OECD Countries **A Compendium of Statistical Information 1987-1988** (1991) (91 90 06 1) ISBN 92-64-13425-5	FF140	£17.00	US$30.00	DM55
Schools and Business : A New Partnership (1992) (96 92 01 1) ISBN 92-64-13632-0	FF75	£10.50	US$20.00	DM31
Schools and Quality : An International Report (1989) (91 89 02 1) ISBN 92-64-13254-6	FF95	£11.50	US$20.00	DM39
The Teacher Today (1991) (91 90 03 1) ISBN 92-64-13413-1	FF90	£12.00	US$20.00	DM35

Prices charged at the OECD Bookshop.

THE OECD CATALOGUE OF PUBLICATIONS and supplements will be sent free of charge on request addressed either to OECD Publications Service, or to the OECD Distributor in your country.

TABLE OF CONTENTS

Foreword by the President of the Conference, Minister of Education and Science, Spain 9

Part One

HIGH-QUALITY EDUCATION AND TRAINING FOR ALL: THE MINISTERIAL DEBATE

Chapter 1 **Introductory address by the Secretary-General of the OECD** 13

Chapter 2 **The ministerial discussion** 17

High-quality education and training for all: the issues under review 17
The debate 20
• Learning for all: challenges and strategies 20
• The quality and relevance of education and training 24
• Improving access and overcoming failure 27

Chapter 3 **The Ministers' communiqué** 31

Challenges for the 1990s 31
Policy orientations 33
Towards learning societies 36

Part Two

HIGH-QUALITY EDUCATION AND TRAINING FOR ALL: THE ANALYTICAL BACKGROUND

Introduction 39

Chapter 4 **OECD economies and societies in a state of change** 41

Demographic developments 41
Structural and technological change 43
The labour market 45
The international dimension 49
The social context 50
Notes and references 53

Chapter 5 **Selected educational developments** ... 55

The changing terms of educational debate ... 55
Some key facts and trends ... 58
Concluding remarks ... 63
Notes and references ... 64

Chapter 6 **Raising educational quality: towards a culture of learning** ... 67

Selected dimensions of quality ... 67
Information about quality: statistics, research, evaluation ... 73
Towards a culture of learning ... 77
Notes and references ... 77

Chapter 7 **Teachers: the key resource** ... 79

The shortage problem ... 80
Conditions and rewards ... 81
Selected equity and quality issues ... 84
Enhancing professionalism ... 86
Notes and references ... 88

Chapter 8 **The disadvantaged and under-represented: extending quality learning to all** ... 89

Equality objectives in debate and policy ... 89
Outstanding problems of disadvantage ... 91
Lines of policy response ... 94
Notes and references ... 97

Chapter 9 **Overview and questions for the future** ... 99

Summary of the main issues ... 99
Some open questions for the future ... 104

STATISTICAL OVERVIEW

Tables

1. The age structure of the population: figures and forecasts, 1970-2 ... 109
2. Enrolment rates in education at ages 17 and 21, 1988/89 ... 126
3. Percentage of women teachers in different levels of education, 1988/89 ... 135
4. The age distribution of teachers: Percentages over 45 or 40 years of age ... 136
5. Educational expenditure, 1989 ... 137
6. Public expenditure, 1989 ... 138
7. Annual average growth rate of real public educational expenditure per pupil/student by level: 1975-80, 1980-88 ... 139
8. Incidence of training among employees by age as measured by *i)* labour force-type surveys; *ii)* enterprise-based or administrative data: 1989 ... 140
9. Public expenditure on special youth and adult labour market training programmes as a percentage of GDP: 1985 and 1990 ... 141

Charts

1. The evolution of different age groups in the youth population: 1970 to 2 110
2. The structure of civilian employment: 1970 and 1989 116
3. Female labour force participation rates: 1970, 1980, 1989 117
4.1. Youth unemployment rates in the 1980s 118
4.2. Adult unemployment rates in the 1980s 119
5. Unemployment by level of educational attainment, for different age groups, by sex 120
6. Enrolment rates for 3, 4 and 5 year-olds in pre-primary and primary schooling: 1980 and most recent year available 124
7. Trends in graduation by field of study from university level of education: 1975-80 127
8. Female participation rates at various levels of post-compulsory education: 1989/90 131

Technical note 143

Annexes

1. Joint BIAC and TUAC statement on education and training 145
2. List of heads of delegations 151

FOREWORD BY THE PRESIDENT OF THE CONFERENCE

It was an honour and a pleasure to preside over a meeting of my Ministerial colleagues at the OECD in Paris in November 1990. Our discussions were lively and broad-ranging, touching on a great many of the issues that all of us confront in formulating policies to meet the challenges of our complex world as it approaches the beginning of the 21st century. To assist our debate, the reference material provided by the OECD Secretariat and reproduced in this volume was perceptive and thorough.

For two days our theme was "High-Quality Education and Training for All". Such a lofty aim is no longer a utopian ambition but has become instead a societal necessity. Knowledge and qualifications are key strategic tools for the prosperity, in both social and economic terms, of OECD countries. All our citizens are caught up in the rapid flow of cultural, social, and economic change. The quality of both the basic education and training experienced by the young, and that of continuing provision for adults, is a prominent concern across our different systems. Indeed, the social partners, as represented by OECD's business and trade union committees, BIAC and TUAC, now talk even more ambitiously in terms of the "total quality" of education and training.

From our debate, I identified a number of main themes as my personal priority areas for future OECD work; naturally, these are closely reflected in the communiqué issued at the close of proceedings. They can be summarised as five points.

First, we are all vitally concerned with the major strategies for educational and human resource investment and policies for lifelong learning in OECD countries. Learning can no longer sensibly be seen as coming to an end at the age of 16, 18, or 21, if ever it once could. But as Ministers, we are all too well aware that resources are not limitless; hard choices must be made and different options explored. Alternatives to traditional delivery systems such as through information technologies and distance learning have their part to play. Inter-relationships and bottlenecks should also be explored: for example, what needs to be done in initial education to make lifelong learning a reality? Are school and upper secondary curricula and qualifications compatible with the major changes occurring in further and higher education in many of our countries?

Second, the need to ensure that education and training are of high quality is more important than ever. It is much easier to agree on the value of quality provision, however, than it is to understand clearly what that means for practice or whether and in what degree existing policies are the most effective ones. In seeking answers to such puzzles, there is, in my view, a major programme for the OECD to continue in the fields of clarification, evaluation, and assessment of policies and outcomes. This review programme should embrace higher and adult education and vocational training and not just what happens in school systems. And, as we stressed in the communiqué, progress implies a strong commitment to R&D and innovation.

Third, there is widespread concern for the disadvantaged. All our countries already have a wide variety of policies aimed at the less advantaged, but in my view this will be even more of a priority in the 1990s than it has been up to now. International studies on the situation of the different disadvantaged sections of our populations in OECD countries would thus be very useful. We need to know more about the policies, already implemented or under consideration, to combat marginalisation and exclusion, whether these are education and training policies or their links with other labour market and social measures.

Fourth, resource questions are critical in all this. It is just not possible to avoid examining such matters as efficiency, the optimum use of resources, their management and redeployment, as well as the questions of new sources and mixes of finance. These must be set against the real-world backcloth of the continued constraints on public budgets. And consideration of funding inevitably raises issues of the organisation and governance of education and training, and even the very nature of educational policy-making.

Fifth, countries are becoming increasingly interdependent, politically, economically, and culturally. There is a host of issues to look at around migration and the international movements and formation of skills, cultural understanding, language policies and development, as well as comparisons of characteristics and performance across systems. The mobility of students and personnel between countries brings to the surface the potentially contentious matters of the equivalence of standards and qualifications across frontiers as well as the broader issues of recruitment and access between one country and another.

The themes of internationalisation and interdependence lead naturally to my concluding point. Our OECD economies are the affluent ones of the world; at our meeting we could assume that the most basic learning needs of our countries are already being met. But many countries are still fighting to attain even this minimum. The Declaration issued by the World Conference on "Education for All" held in Jomtien, Thailand, in March 1990 represented international determination to provide this fundamental right to citizens in all countries. Among its clauses, it states:

> "Meeting basic learning needs constitutes a common and human responsibility. It requires international solidarity and fair economic relations in order to redress existing economic disparities".

Fashioning a constructive future for education means knowing how to build a fair and secure world on the basis of mutual knowledge, co-operation, and solidarity. We hope our Ministerial meeting made its own modest contribution to this mission.

M. Javier Solana Madariaga
Ministry of Education and Science, Madrid

Part One

HIGH-QUALITY EDUCATION AND TRAINING FOR ALL: THE MINISTERIAL DEBATE

Chapter 1

INTRODUCTORY ADDRESS BY THE SECRETARY-GENERAL OF THE OECD

It is six years since the previous meeting of Education Ministers was held here at the OECD. These six years have witnessed great changes. Education has moved into a very prominent position in the political and public eye. The challenge now is how to meet the very high expectations that are hinged on your policies. We see such expectations, for example, in the views of the social partners. BIAC and TUAC describe as "conventional wisdom" that investment in education and training is a key to economic success and they go on to describe the education system as "the cement of social cohesion".

Education is, by its very nature, long-term. Fostering and changing knowledge, skills, attitudes, and values is not an instant process. The educational investment reaps substantial benefits over a very long period. Yet the long-term nature of educational activity does not lessen the need for clear reflection and action in the very immediate term. It is a matter of marrying long-term vision with immediate action. This meeting will, I hope, be an opportunity for considering how this can best be done.

In the world economy, the past decade has been one of a drive towards structural adjustment and of rapid technological development. This is why this Organisation has been making, over recent years, a major effort to analyse the complex relationship between technology and economy. Patterns of world production and trade, and of employment and work processes constantly evolve. There is now a growing number of countries reporting skill and labour shortages, despite continued unemployment. Education, training, and retraining, of the young and of older adults, are vital components of comprehensive policy strategies to meet these shortages and mismatches. Global environmental problems have also come to receive widespread attention in recent years and your Environment colleagues also discuss these problems.

Two themes run through contemporary change. First, there is the fact of change itself and the need to manage, even generate, it while ensuring continued stability. Education is at the fulcrum of these two fundamental and opposing pressures. We extend to education unique responsibilities for generating social, economic, and cultural transformation, yet expect it also to transmit established knowledge and values and to preserve all that is best in our cultures. The second underlying theme is that of interdependence and the internationalisation of developments and policies in areas that before were considered national, even local, matters. Such internationalisation touches education – which is by definition so close to different national and cultural identities – as profoundly as it does other policy spheres. The OECD provides you with a forum for policy formulation that allows for the comparison of problems and achievements,

and co-operation and co-ordination across our different countries. Such exchange is now more relevant than ever.

With this in view, the approach to the discussion over the next two days may be summarised by three related points:

i) That "education", narrowly drawn as that which takes place within our schools, colleges and universities, should be seen as one component, albeit a vital one, of the overall effort to human improvement which takes place in all the different settings of learning: in families, communities, enterprises, political institutions;

ii) That to understand the full potential opened up by education and training means to locate them firmly in their wider economic, social, cultural and political contexts. Education's goals should reflect our ambitions in these other fields, but that does not in the least imply that the policies you are responsible for should become narrowly subservient or instrumental. Education must remain creative and active, not be merely reactive;

iii) Going one step further, learning, expertise, and human resources – the "human factor" as it is sometimes called – are critical elements of the well-being of our economies and societies. Once again, a narrow viewpoint is unlikely to be helpful here. Learning is not, in our view, merely a mechanical process. It embraces creativity, openness to new ideas and the ability to learn afresh, and the capacity in individuals to make sense of new situations and unknown circumstances.

The range of issues you will be addressing over the next two days is impressive. "High-Quality Education and Training for All" surely summarises the scale of the challenge we are all facing. It takes up and elaborates the themes that some of you already discussed in Thailand at the World Conference on "Education for All". The ambitious title of today's meeting recognises that education and training will miss their mark if they are of poor quality, badly organised, and ineffectively delivered. But it also stresses that the benefits of learning must be extended as widely as possible and not only to the young and the already-educated. The less privileged, the older worker and the retired, the adult who is illiterate, and those who simply missed out first time round must all be included as well as the traditional student who remains, of course, as important as ever.

Your agenda captures this range of issues. The first item "Learning for All: Challenges and Strategies" allows for consideration of the main policy priorities and problems to be tackled in the course of the 1990s. Then we focus in more depth on the two complementary sides of the main theme: "The Quality and Relevance of Education and Training" and "Improving Access and Overcoming Failure". No one can pretend that there are not difficulties and dilemmas inherent in realising high quality education and training for all. For one thing, there are thorny issues of financial costs and of who will pay – high quality education and training for all, no matter how beneficial it may be, obviously does not come cheaply. There is the long-standing question, central to your theme, of reconciling excellence of provision with equality of opportunity for all citizens to gain access to good education and training. There are the difficult questions of how to introduce a full diversity and plurality of educational offerings without also institutionalising new barriers and inequalities of social standing and value between those different offerings. And there is the need to recognise that we are addressing *both* the initial foundation of knowledge, skills, and values as provided through schools and colleges, *and* of putting in place widespread opportunities in learning to be continued on a lifelong basis, whether for education or training. All these aspects need to be emphasized.

Education and training should not be regarded in isolation from their broader environment. Thus, an integrated approach across the different policy spheres is called for.

Your meeting today is the first of a series a high-level meetings building such an integrated approach. There will be an Intergovernmental meeting, drawing on both the education and the labour market sides of the OECD, on the further education and training of the labour force. This will be followed by two more Ministerial meetings, the first of Labour Ministers and, later, one of Ministers responsible for social policy. This series of meetings will, I hope, provide the opportunity to identify not only the areas of priority concern within the different aspects of policy but also their interaction and the ways in which they can be mutually supportive. We look forward very much, therefore, to your debate in launching us on this process.

Jean-Claude Paye

Chapter 2

THE MINISTERIAL DISCUSSION

HIGH-QUALITY EDUCATION AND TRAINING FOR ALL THE ISSUES UNDER REVIEW

First session

The pace of contemporary change heralds in a decade already transformed in many, often unexpected, ways from the world as it was at the beginning of the 1980s. To manage, even generate, quickening change while ensuring stability has itself become one of the policy challenges of today. Traditional distinctions – between the economic, social, and political, between efficiency and equity, between the national and international – are increasingly inadequate to grasp the nature and scale of contemporary developments.

All OECD economies are engaged in a process of structural adjustment shaped by forces as diverse as local initiative and cross-national interdependence. Pervasive technological development has far-reaching social and economic causes and consequences, and it constantly redefines the topography of relevant knowledge and skills; in the process, some people get left aside. Continued high unemployment levels in certain OECD countries coexist with emerging labour and skill shortages, these shortages fuelled by demographic downturns for the age groups entering the labour force. This factor, along with the range of other international developments in train, looks set to bring new scale and patterns to migration and these raise their own challenges for education and training. More generally, developments outside the OECD area, in Eastern and Central Europe, the newly industrialising economies, especially those in South-East Asia, the poorer and very poor developing countries, all point to the profound evolution of the economic and political dimensions of international relations. In this context of rapidly evolving interdependence, outstanding environmental and health problems call for global initiatives and joint action.

Knowledge, skills, information, values, communication and exchange – the very stuff of education – lie at the heart of these developments and the challenges they represent. Education, broadly conceived, is both a defining characteristic of modern societies and a key strategic means for realising desired change. It concerns all citizens, young and old. It involves all learning settings, whether the established institutions of schools and colleges, non-formal arrangements in enterprises and communities, or other sources of knowledge and influence, such as the media. The demanding aim is to realise a high quality education and training for all. In this, policy solutions cannot be sought through education alone – concerted action is needed with the different related parties, agencies, and policy sectors. More satisfactory co-ordination

may well be needed between the different levels and sectors of education and training themselves. And important questions concerning resources – financial, physical, and human – inevitably arise given that more extensive educational opportunities are sought against a background of continued constraints on public budgets.

Under the general theme of *challenges and strategies*, the Ministers discussed three broad questions: outstanding issues deserving special attention in the decade ahead; the implications of these for educational participation, costs, and governance; and the steps to be taken to realise lifelong learning. Specifically, these questions were framed in the following terms:

1. *What are the most important challenges which define the broad policy agenda for education and training over the 1990s? Can they be met with incremental change or do they call for radical reforms?*
2. *Have new priorities and targets of educational provision been set in the light of these challenges and what are their implications in terms of costs and finance?*
3. *Is realising the overall aim of lifelong learning a current priority? How can it be achieved efficiently and equitably and what is the proper role for the education authorities in making it happen?*

Second session

In recent years, many OECD countries have sought to raise the quality of schooling as a policy priority. A variety of criticisms and concerns has added urgency to the task: fears that too many youngsters have been leaving education ill-equipped for the modern world, that standards, however they compare with the past, need to be higher still, that educational deficiencies might lead to slippage in a country's world-wide economic competitiveness. A common perception in some countries has been that there is insufficient "quality control" in the form of adequate knowledge about how schools function and perform; by the same token, criticisms themselves are often based on a weak empirical foundation. Other common concerns question the quality of teacher intake and the degree of responsiveness of schools to the outside world. Positively expressed, an important impetus to raising quality is the renewed awareness that schools and teachers are national resources that are too vital to suffer neglect or be left to the conflicts of sectional interests. Yet, what quality actually means and the best route to its improvement remain open to a wide margin of interpretation.

As countries enter the 1990s, the focus of debate realigns once more. First, the realisation grows that the pursuit of quality is just as important in vocational training, further and higher education, and various adult provisions as it is in schools, still more so if lifelong learning is to become a reality for all. Second, education and training must not only be good in their own terms, they must also be relevant to the clienteles they serve, notably the pupils, students, and trainees. Narrow definitions of relevance are unlikely to be useful. To enhance just employment relevance is to foster creativity, synthesising and problem-solving competences, social and personal skills, and the knowledge and abilities to make informed choices as well as the narrowly vocational; indeed all of these are of particular importance in the face of rapid social and economic change. The ingredients of relevance are still more varied when it is defined as useful preparation for citizenship, parenthood, or democratic participation. To improve both the quality and relevance of education thus raises profound questions about curricula and methods of learning, knowledge by the different clienteles about what takes place in education and the options available, the degree of openness and innovation enjoyed by institutions of learning,

and the teaching staff who carry the major burden of responsibility in practice for improvement.

Issues under review included the main policy strategies relating to *quality and relevance* and their coverage, and the key contribution of evaluation, assessment, information, and research. So too were policies for teachers given that in a number of countries worrying signs of staff shortages place a serious question mark besides ambitions of reform. The precise questions guiding the debate were:

1. *What are the main policies and strategies directed at improving the quality and relevance of education? How explicitly has such improvement become a principal aim in the levels and programmes beyond the school system itself?*
2. *In what ways are evaluation and assessment integral components of current policies and reforms? How adequate is the knowledge base provided by evaluation, research, statistics and indicators?*
3. *Are serious problems of teacher shortage foreseen and at which levels of education and training? What measures are being taken to ensure the continued supply not only of adequate numbers of staff but that these are of the requisite quality and experience?*

Third session

Improving access and overcoming failure in education are long-standing concerns, but the situation confronting the disadvantaged and the under-represented now takes on new urgency. The growing importance of education and training for all has meant that the costs of failure – economic, social, and individual – have become unacceptably high, particularly for those left behind or marginalised through inadequate attainment levels. The economic costs cannot be underestimated. Insufficient use by a country of its potential talent and skills in the intensely competitive world of the late 20th century means to lose a vital edge. The social effects of sections of OECD populations being left behind are just as clear and carry their own high economic costs. The danger is of societies becoming increasingly polarised, with educational attainment as one of the main mechanisms for participation or exclusion. ''High-quality education and training for all'' thus remains only a slogan unless substantial efforts are directed at ensuring that those who benefit least are given every opportunity to make good that lack.

The principal forms of educational underachievement are themselves well known. They result from the interaction of the different economic, social, and educational factors that can amount to a vicious circle. Poor resources for learning in the home and community all too often soon become manifest as poor achievement and low motivation as the pupil progresses through schooling, compounded by what are seen as unattractive curricular offerings and uncongenial school environments. Those programmes and branches designed to cater for the learning needs of the disadvantaged, no matter how innovative in practice, tend to be stigmatised and undervalued both within education and training systems and by employers and the community. A poor educational foundation becomes exacerbated on entry to the labour market; while the previously very high levels of youth unemployment are tending to decline, so too are the numbers of low-skilled jobs – knowledge and skills are today at a premium. The vicious circle can by this time be very firmly entrenched through a combination of factors: early low attainment continuing on to adult life perhaps in the form of functional illiteracy, existing education and training opportunities for adults predominantly organised for the already educated, those in most need tending to see little value in a return to organised learning. Just as the

problems have economic, social, and educational roots, so too are integrated responses required across these different domains. These need to be designed for, and in co-operation with, those being targeted, including children and young people "at risk", the disabled, disadvantaged minorities, the unemployed and low-skilled adults. For education and training systems, the wholesale review of mainstream provision, focusing on its scale, nature, and opportunities for access, may be needed. Attention should also be given to innovative targeted measures, whether developed internally or in co-operation with the other partners and agencies.

Ministers were invited to address the issues of *improving access and overcoming failure* in relation to policies for the different stages of the life cycle: childhood (pre-school and school), adolescence, and adulthood. The precise questions guiding the debate were:

1. *Are there new policy strategies to break into the cycles of disadvantage – educational, social, and economic – whose compound effect can be so telling in the early years? Are radical changes needed in the provision of pre-schooling and schooling to combat underachievement?*
2. *What are the most successful programmes for disadvantaged adolescents coming towards the end of compulsory schooling and in the years that immediately follow, and how effectively do they reach the most seriously disadvantaged?*
3. *Which are the major target groups among the adult population whose learning needs are most pressing or who at present avail themselves least of education and training opportunities? What are the main policies directed at motivating and reaching these groups?*

THE DEBATE

Learning for all: challenges and strategies

The introductory country contributions to this first main session of the Ministerial meeting were given by Mr. Alan Howarth, Under-Secretary of State, Department of Education and Science, United Kingdom, and by M. Robert Chapuis, Education Secretary of State on behalf of M. Lionel Jospin, Minister of Education, Youth and Sport, France.

Mr. Howarth opened his remarks with a tribute to Mr. George Papadopoulos, Deputy-Director for Education at the OECD, for whom the Ministerial meeting was his last major event before retirement.

The "first purpose" of education, he continued, is to serve the individual, but this means understanding that the individual is at the centre of a complex array of demands, pressures, and structures. Education for the individual is thus primarily about developing the intellectual, moral, and practical skills for the different roles relevant in today's world. A vital element here is to foster respect for teaching and the active involvement of teachers in the reform process. Another is for education, and indeed all the agents of learning and socialisation, to foster "critical intelligence" in order to counter the "cultural mediocrity" that Mr. Howarth emphasized as one of the worrying characteristics of modern life. This must be seen against today's social and economic context: unskilled labour continues to decline in importance, science-based jobs increase in number, and rapid change places a premium on second-chance education

and training opportunities. New forms of economic organisation require that all in our societies be numerate, literate, scientific, articulate (and this in more than one language), and able to work co-operatively in teams. A key educational issue here remains, he said, the long-standing one of balancing the aims of widening access and maintaining excellence. To address this satisfactorily, close attention must be given to concrete policy questions such as the provenance of adequate resources and the actual strategies to be adopted, rather than engage in purely theoretical or ideological debate.

Mr. Chapuis responded to a number of the open questions posed by Mr. Howarth. While broadly agreeing on the nature of the challenges, the importance of the individual, and the major social and economic movements in train, he also placed particular emphasis in this on the attitudes of the young themselves in clamouring for "a quality education for all", and on the compatibility, rather than conflict, between realising access and high quality in the educational sphere. The resource issue, he agreed, is critical in realising qualitative change, though quantitative expansion and increased resources by themselves will not bring about the desired reforms. Answering the question posed by the United Kingdom Minister concerning the concrete policy strategies to adopt constituted the core of his presentation. In brief, at the school level in France, current strategies address a number of the key aspects together: respect for the continuity and rhythm of learning, curricular contents, evaluation and methods of work, and the orientation of pupils and students, with the continuous dialogue between all concerned, through the different programmes of study. Major questions remain outstanding. There is, for example, the need to avoid the common dysfunctional disparities of prestige between different programmes, especially between the general and the technical/vocational branches. Equally, for the increasingly heterogeneous student population to be properly catered for implies breaking down the most rigid, tradition-bound practices. Problems are raised as acutely as anywhere in higher education, where there is currently a very rapid growth of student numbers in France, leading to new policy questions about, for instance, the overall capacity of the system, student aid, and teacher supply. A major aim of current higher education reform, he said, is to promote diversity of learning opportunities and complementarity across the different institutional settings. This is seen in a national perspective, of course, but also reforms must take account of both regional and international considerations, in terms of the teaching that is provided and the research undertaken.

Many of the Ministers outlined their vision of the *main aims and features* of education as a new century dawns. All recognised the multiplicity of roles and functions served by education in today's world. Indeed, several identified the intensity of the pressure on education and its financing stemming from the sheer scale of current expectations as a major characteristic across OECD countries. Yet such recognition did not amount to bemoaning that other policy sectors are not taking on their full share of the tasks currently being shouldered by education and training systems; it was instead the expressed hope that the various societal and economic interests should clarify the full extent of what they hope can be achieved by these systems, taking due account of the resources needed and made available to meet such ambitions. One Minister went so far as to describe the dissonance between the scale of the aims and the limits on the resources made available as education's "social schizophrenia".

Concerning aims and challenges, there were important differences of emphasis placed: for example, between the view that economic objectives now set the agenda for educational policies (albeit in ways that were maintained to be consistent with other long-term objectives), and the assertion that aims cannot be "reduced" to labour market and economic functions. A further difference of viewpoint, though it was again perceived to be largely one of emphasis, was between statements that learning, education, and training are crucial to the successful

functioning of contemporary societies and economies, as compared with the contrasting call to "demystify" the more ambitious claims for education's value and to identify thereby "the limits to educational growth" (just as some economists have previously sought to dispel the argument for economic growth at all costs).

A recurrent theme of this Ministerial debate, despite the lofty aims and missions under discussion, was the need to learn from recent history by avoiding the trap of slipping into mere *rhetoric*. Repeatedly, the risk was identified that the scale of the expectations being accorded to education and training might herald a corresponding but counterproductive inflation in the rhetorical terms of debate concerning education's importance, value, etc. Some identified the most effective antidote to the rhetorical as lying in greater social dialogue, including the different sides of industry, in order to arrive at greater clarity and consensus about broad aims, new responsibilities, and the means to realise these. The "closer identification of priorities" was how some expressed it. Another expression of this is the call for a strong focus on specific policy and educational strategies. One Minister outlined a ten-point strategy to this end, covering all levels of education and training from pre-primary to adult provision of different kinds. The encouragement of broad-ranging social dialogue about education and training meets not only the goal of avoiding the rhetorical to identify aims and policies; the more specific benefit of such dialogue is to break down "the wall of isolation" that is currently so detrimental to education and training.

A further rationale for being much more specific about policy strategies, and linking these to resource questions, is to allow for the closer understanding of what is *effective* and *efficient*, thereby providing the evidence precisely to move beyond the level of rhetoric. This is a matter of substance as well as of approach; one Minister expressed the conviction that the evidence about effectiveness and efficiency in education and training serves to make the case for "human investment" as being just as vital for social, economic, and cultural well-being as the more conventional forms of physical or financial investment. The emergence of efficiency concerns can also characterise the changing educational debate internationally – from that of the 1960s and 1970s, typified by attention to equality of opportunity, individual chances, and the influence of the social environment, to that of the 1980s, with the pre-eminence of the aim of raising educational quality, and the shift in focus towards organisational factors (*à propos*, several countries reported how radical had been the reorganisation of their education systems latterly). The importance and timeliness of this particular OECD Ministerial meeting, it was concluded, was in drawing these two major strands together in looking forward to the 1990s, as summarised in the conference title "High-Quality Education and Training for All".

Despite the detailed treatment that the subsequent agenda allowed for addressing matters of both *equity* and *quality*, many of the Ministers emphasized from the outset how central are these considerations to their countries' strategies for the 1990s. That achieving equity and quality should be complementary not competing goals – "learning for all is a basic tenet of our policy but equity must not compromise excellence", said one Minister – commands widespread support. One formulation of this belief is that a wide diversity of courses and programmes, and efficiency in the distribution of teaching, learning, and employment opportunities, are preconditions for ensuring that the pursuit of the aims of excellence and widening access do not work in opposition to each other.

There are diverse priorities concerning the targets of policies to ensure greater equity. Demographic changes and the rapid obsolescence of occupational knowledge were described as key trends bringing *intergenerational* educational disparities to the fore. Realising a genuinely *multicultural* society, with education playing its full part, was also proposed as an outstanding task for the 1990s. The aims of *gender* equality are paramount in some countries. The

importance of *literacy* also arose both in the sense in which it is widely understood, with 1990 as International Literacy Year, and in the rather different sense of "social literacy" for full participation in society and the economy. Put another way, the economic and social costs suffered if a country's talents are not exploited to the full is an essential if neglected aspect of the calculus of education and training's importance today. The situation and integration of the *disabled* was another identified policy target. Whatever the target, the warning was sounded that traditional stratifications and polarisations should not be allowed to emerge in new guises to jeopardise the very reforms designed to equalise chances.

The issues of the *quality* of teaching and learning also featured prominently in the Ministers' outline of the challenges and strategies for the 1990s, in anticipation of their more detailed subsequent discussion. These were expressed in global terms: for example, "the challenge is how to transform mass schooling into quality schooling"; the emphasis is now on learning and outcomes, with the relevant variables not restricted to educational inputs. They were also expressed in more specific terms: the teacher's vital role and the need to reorganise teaching to move beyond outdated and ineffective pedagogical models; the creation of new combinations of theoretical and practical, general and specialised study, and the greater overall diversity of programmes combined with the removal of traditional inequalities of prestige between the different programmes; the reorganisation of schools and colleges towards greater self-autonomy.

While the examples drawn on by many of the Ministers referred to "schools", "teachers", "curricula", "methods of teaching" and were drawn primarily from systems of initial education, a very large measure of consensus was reached on the central position of *lifelong learning* as the direction for change in the 1990s and into the 21st century. There are developments towards more inclusive "cradle-to-grave" strategies, encompassing all settings of learning, and including education, training, and the wide variety of non-formal programmes. Large-scale social and economic changes – rapid occupational and technological change and knowledge obsolescence, foreseen skill shortages, the phenomena of socio-economic marginalisation and exclusion, the emergence of "ageing" societies with new configurations of work and other activities including leisure – were brought into the picture, buttressing the rationale behind lifelong learning as a central organising tenet of OECD countries.

Just as clarification of, and research into, the learning needs of youngsters was called for, so were the specific learning needs of adults identified as a priority area for further investigation. In particular, there is the need to know much more about those adults who have benefited least from their initial education and who now possess only a low propensity to return to education or training. Concerning provision, education and training should in turn be more closely geared to the needs of all potential adult students, including here the adult education sector, enterprises, and forms of distance learning, but also bringing in the formal systems of post-compulsory, tertiary, and higher education and training. Several Ministers maintained that this is an area, *par excellence*, where greater dialogue between all the social and economic interests involved, including the social partners, coupled with a profound rethinking of roles, responsibilities, and resourcing, are matters of high priority.

Ministers are now keenly aware of the *internationalisation* of relations and policies in general which affect education and training specifically in very diverse ways. Attention to languages and environmental matters in school curricula comes up in looking beyond national frontiers for guidelines to policy and practice. For European Ministers, the far-reaching changes taking place in that region, including in Central and Eastern Europe, and with greater integration of markets throughout the EEC, naturally provided a focus for their remarks, but whatever the countries and regions in question, internationalisation is now a high priority for attention

over the coming years. In defining the scope of this concern, there may even be a tendency to, if anything, draw the international focus too narrowly – for instance, to include European or OECD countries exclusively – thereby missing, for example, the vital contribution of OECD countries to policy co-operation and dialogue with non-OECD countries. One example of such dialogue had recently taken place in March 1990 in Thailand with the staging of the *World Conference on Education for All*. The value of international analyses of education and training, including of those developments such as the emerging international skill and knowledge markets that are at present ill understood, was also acknowledged. In this, the OECD approach should prove to be especially valuable.

The quality and relevance of education and training

The country statements that introduced this second item on "the quality and relevance of education and training" were delivered by *Ms. Marianne Tidick*, Minister of Cultural Affairs for the Land of Schleswig-Holstein, Germany and current President of the Permanent Conference of Länder Ministers for Cultural Affairs and Education, and *Mr. Pedro d'Orey da Cunha*, Secretary of State for Educational Reform, Ministry of Education, Portugal.

Ms. Tidick reminded participants of the particular German situation – only shortly before transformed by the addition of five new *Länder* – where each state enjoys constitutional autonomy to direct educational policy with the responsibility to ensure quality and results. Yet comparisons, even competition, also exist between them on such matters as improving pupil/teacher ratios, curricular contents, and school organisation, thereby bringing educational quality forward for policy debate at the national level. And there are regulations at the federal level governing such matters as length of training and pay of teachers, timetables and minimum requirements in individual school subjects for different grades and types of school, vocational training, and the *Abitur* or university entrance examination. Within this German framework, or whatever the arrangements in place in each country, Minister Tidick outlined some open questions for general consideration. There is, for example, the appropriate role of competition within education systems, and the need to know more fully when it enhances or hinders performance. In relation to this, how can the most effective autonomy for schools and colleges, seen as integral parts of their communities, be encouraged? There is the question of how to derive better information and data, quantitative and qualitative, and the appropriate role of research. And there is the pressing question – even in a country like Germany where teaching staff, relative to many other countries, enjoy advantageous conditions – of attracting and maintaining the high quality personnel that are so vital to quality learning.

The quality of education, proposed by *Mr. da Cunha*, is examined classically in terms of inputs (curricula, pedagogy, evaluation and management, facilities, teachers, social action) or in terms of strategic means for optimising results or outputs for given inputs. But there is, besides, the whole question of outcomes and the desired profile for the pupils and students who come out of our education and training systems. In this latter optic, one vital question tends, he considered, to be neglected: do pupils develop an adequate sense of moral direction and conscience from their educational experience? The place of values in education, Mr. da Cunha proposed, would be one of the main preoccupations for the 1990s. Concerning pupils, this would mean, at least, that the organisation of schooling and the different aspects of study should be reviewed in terms of their success to promote the learning of values and morals. Religious education should be available to all, or, for those preferring otherwise, programmes in personal and social development. Similarly, moral and ethical criteria might be deployed in

the selection and training of the teaching force; they should certainly, maintained the Portuguese Minister, be a major feature of their subsequent exercise of professional duties and their career development.

The Ministers proved eager to engage in the philosophical debate over the *concepts* of "quality" and "relevance" in the educational field. Differences of educational and cultural traditions and of underlying philosophy, as well as of emphasis, elicited a variety of definitions. As in the first session of debate, the contrast was drawn between a focus on the mission of promoting the qualities relevant for professional life – themselves wide-ranging and not necessarily inconsistent with other humanistic and cultural concerns – and a preoccupation precisely with those concerns as the paramount objectives of education. Following the latter path, quality of education can be viewed as making an essential contribution to the overall quality of life, though it was recognised that specifying the contents of such terms is no simple or clear-cut matter. In the same vein, it was observed that no one should expect education to provide a "quick fix" for other social or economic problems.

Ministers grappled with such thorny questions as the degree to which a "relevant" education and one of high quality are identical, or whether the cognitive and non-cognitive aspects of learning can be reconciled, without suggesting that such contrasts as between the cultural and the vocational, or between the instrumental and the general, exist as mutually exclusive aims. There may nevertheless, warned one Minister, be inconsistencies between the pursuit of general education and preparation for employment, as these are interpreted in concrete policy and practice. And the aims proposed as paramount for the 1990s can cut across the domains and categories that are sometimes contrasted: one Minister, for example, viewed the purposes of educating for awareness of technological issues, of the environment, and for tolerance, as foremost among contemporary goals. For another, the need to delineate, and to educate for, the knowledge relevant for the world of the 21st century is vital but so is education for a "new moral imperative" and the acquisition of a general "knowledge of consequences".

Given the importance attached to *lifelong learning*, as made clear in the first session of debate, it was not surprising to find this re-echoed in the definitions and concepts discussed. References were made to the importance of "learning to learn", "acquiring respect for learning", and "having positive attitudes to continue learning", proposed as major criteria by which to judge the effectiveness of initial education and training, i.e. the degree to which these branches contribute to the overall learning effort in a lifelong perspective.

Just as precise definitions of educational quality and relevance in general prove elusive, so does the more specific delineation of what constitutes quality among *teachers* and their *teaching*, despite common agreement that this lies at the heart of the matter. Countries start from quite varying situations concerning whether general teacher shortages are being experienced or are in prospect, or whether instead teachers are still in relative surplus. No matter what their actual experience in this regard, the view is widely shared that the status and attractiveness of the teaching profession must be raised if the critical role of learning to contribute to the well-being of contemporary societies and economies is to be fully realised. How far this might require substantial additional resources to boost levels of pay or whether the redeployment of existing resources and greater efficiency in their use will suffice, were alternatives raised for consideration but on which no decisive answers were given. From the range of policies currently being implemented in different OECD countries aiming to improve teacher quality, it can safely be concluded that few regard resourcing and salary levels to constitute the whole of the story. The nature, coverage, and extent of pre- and in-service teacher education and training, bursaries to encourage entry to teacher training, leadership and management capacity, alternative forms of certification and career structuring, improved career oppor-

tunities, "merit pay" packages, and other conditions of service and benefits were all identified as areas of current reform or for potential improvement.

In discussing the quality and relevance of education and training, issues of *curriculum* and *evaluation* naturally figured too. The limited time available precluded the description of national arrangements; nevertheless, several Ministers drew attention to the centrality of curriculum reform to the educational policies being implemented in their countries. The curriculum is not apart, of course, from all the major policy currents and preoccupations discussed at the meeting – each finds reflection in the nature, organisation, and contents of teaching and learning, in short, in the curriculum. Thus did such matters as internationalisation, and the achievement of equality and the overcoming of failure resurface specifically in the context of curriculum change.

Assessment can be closely tied in here, as there is a widely-held view that a necessary accompaniment of efforts to revise the organisation and content of learning are the mechanisms to measure what has been achieved. Straightforward though that is to state as a principle, it raises a host of conceptual and practical issues and problems, as encapsulated in the deceptively simple question asked during the session "but how do we measure quality?" The contribution that *indicators* of educational performance and progress can contribute was acknowledged, as was the potential of the OECD to play a major part in their development. More generally, several Ministers pointed to the need and value of greater *research* efforts and their use in policy design and implementation. A deeper understanding of successes and of effectiveness, and of the factors that make for these, thus represents another pathway in the pursuit of the improved quality and relevance of education and training.

The issues of *organisation, governance, and decision-making* constituted a major element of the discussion. This included decentralisation – its various forms, as well as associated advantages and drawbacks. For example, there is the issue of the degree to which greater decentralisation exacerbates inequalities of educational provision and opportunities between schools, communities, and regions, whether greater inequalities represent an acceptable cost of endeavours to raise quality in general, or whether instead they are an unacceptable consequence of structural reform. One intervention highlighted the lack of an automatic link between greater decentralisation and improved quality. This calls for the specification of precise forms of decentralised systems and decision-making structures, and the conditions under which improvements can be realised, conditions which are likely to include positive, even aggressive, management strategies directed towards quality enhancement and relatively large school units.

The role of the central authorities in decentralised systems thus remains a critical one. It may be exercised by defining national norms, addressing special needs, or promoting change. The importance of partnerships involving education and training bodies, their different clienteles, and the social partners, instead of power being exercised top-down through highly centralised channels, can be a valuable pathway towards the improved quality and, especially, the *relevance* of education and training. And there was endorsement of the benefits of enhanced autonomy for educational institutions – mainly schools, but also in relation to autonomy and choice in the higher education sector. In a number of countries at present, the enhancement of local, school-based autonomy, closely involving the parents and the community, represents an important plank of the overall reform of education. The concomitant increase in the workload that this can bring with it at the local level did not pass unremarked, nor did the related need for all the professionals and "actors" involved to be fully prepared for their new, extended responsibilities. There was widespread agreement on the importance of fostering new partnerships, reflecting the reality of more complex provision of learning in OCDE countries, the need

to seek new sources of finance and to optimise the use of existing resources, and as a desirable aim in its own right.

Improving access and overcoming failure

The final item – Improving Access and Overcoming Failure – was introduced from North American and Scandinavian perspectives by, respectively, *Mr. Lauro F. Cavazos*, Secretary for Education, United States, and *Mr. Göran Persson*, Minister for Primary, Secondary and Adult Education, Sweden. They recognised that a great many issues pertinent to these themes had already been aired extensively in the foregoing discussion, including their own interventions.

Prominent among the reasons why the subject matter of this part of the Ministerial discussion is so important for OECD countries, *Mr. Cavazos* began, is the *long-term* social and economic impact of *current* or immediate educational failings and shortcomings. For example, the renewal of a workforce, especially relevant when there are deficiencies of knowledge and skills, can only be a very slow process in terms of the change brought about through new entrants and retirees. Moreover, low-income and minority groups, who tend to benefit least from education, are a growing proportion of our workforces, said the Secretary, and the large-scale immigration that the United States has experienced in the 1980s may well become the generalised pattern across many OECD countries in the years to come, bringing in turn special urgency to issues of access, especially for adult education. These were among the factors that led to President Bush convening the Educational Summit of Governors in September 1990 with a view to improving the quality of education throughout the nation. The result of this has been unprecedented agreement on a series of national goals to be achieved by the end of the decade. Drawing on his specific national situation and these newly-formulated goals, Mr. Cavazos posed a series of questions for general consideration:

- In what ways have pre-school provision, programmes, and interventions helped to overcome later educational failure?
- What policies and practices have proved most successful in preventing school drop-outs?
- Where has experience in tailoring programmes towards "at-risk" students proved most effective, including those courses combining academic and practical, job-training elements?
- What are the most promising ways of ensuring that minority and disadvantaged students can benefit as much from post-secondary education as the rest of the population does?
- As the U.S. national goals include a commitment to adult literacy and lifelong learning, is ensuring access to lifelong learning the best long-term strategy, not only for overcoming failure but also for coping with the rapid economic and social change that characterises modern life?

The long-term social and economic factors that give special urgency to the need to improve access and overcome failure, including the preservation of the very democratic basis that characterises OECD countries, were themes echoed strongly by *Mr. Persson*. He talked of a "new underclass", which is increasingly composed of the young and those who have failed in education, a category which may well cost Western industrialised societies very dear in the years to come. The United States emphasis on early education was also reflected in Swedish priorities, where the aim, he said, should be to integrate pre-school activities as much as possible into the school system. Contents and working methods in schools must be closely

scrutinised to make them relevant to all; workplace changes based on greater participation and teamwork, and enhanced responsibility, provide a vital lead here for educational reform. Those of upper secondary age who, with whatever efforts expended to keep them in school, decide to leave, remain within the responsibility of the municipality in Sweden for their introduction to working life. Over and beyond these aims and approaches, Mr. Persson identified a new mission for schools: to help construct a world that is ecologically sustainable. If this cannot be achieved in our affluent societies, he asked, how can comparable demands be made on those in the Southern hemisphere?

The discussion during this session of the meeting demonstrates just how closely the aims of enhancing access and addressing problems of failure come together with those of ensuring the *quality* of learning and provision. How this alignment is made in practice, however, can vary along a number of dimensions. Addressing failure is, for some, principally a matter of making systems, programmes, and cycles, more flexible. In this perspective, the attack on failure is through seeking a more individualised approach and a better "match" between the capabilities and background of pupils, the skills required in the modern labour market, and the general capacities to cope with change and uncertainty.

The link can be very closely drawn, in identifying the mechanisms to implement this in practice, to policies for *evaluation* and *assessment*. There is, for example, the possibility to use extensively pupil evaluation for diagnostic purposes in order to provide teachers, and all others concerned, with the sort of detailed mapping of pupils' learning deficiencies that might permit their rectification. There remains, of course, the open question of how this works in practice. A related approach is through the alignment of assessment and certification practices to reflect more what students can do and have learned, rather than to mark them down for what they have not – a shift of emphasis from "selection out" towards the positive assessment of achievements and talents. Again, difficult questions in practice are raised; the "sociological" forces for differentiation and social selection can be so powerful within education systems and through society at large as to jeopardise even the best of reform intentions.

The tensions involved in finding the right balance of *greater diversity without in-built marginalisation* or, put the other way, of mainstreaming all groups without entailing such uniformity of provision that failure is automatic, surfaced repeatedly throughout the discussion. There are different traditions and views concerning the efficiency and effectiveness of *special measures* to provide a supplement to mainstream provision, and, in those countries whose decision-making structures favour the creation of centrally-funded special programmes, the degree to which these add to or simply displace more local provision.

The avoidance of marginalisation has now become a major preoccupation of policies aimed at assuring access and equity. One expression of this concern is the observation that, for example, halving the drop-out rate – by many standards, a major step on the road to greater equity – brings with it a greater measure of exclusion for that now smaller group who are still unable to complete a full programme of education with the same attainments as the majority. Interpretations differ indeed on the centrality of the drop-out problem to equity concerns: for some, the rate of dropping out represents an essential indicator of the efficiency of the system; for others, it is a quantitative preoccupation that diverts attention from the qualitative reform of what is actually taught and learnt so that all benefit from education and learning.

The curriculum is thus as much at the heart of these issues as it is of those to do with the quality of learning; a powerful sign that quality is satisfactory is that students who would otherwise have little to show for their education instead are able to learn and go on learning. A variety of strategic elements and priorities are in evidence. A greater emphasis on mastery of

language, in both oral and written form, is one such priority, including of the mother tongue when this differs from the majority language. Sustained, intensive *guidance* is another, in tandem with attention to the suitability of curricular offerings to meet the diversity of students' needs and interests (otherwise better guidance will simply expose inadequacies of provision). Institutional and curricular offerings other than those of the formal mainstream system may be best for those who are least motivated by what is currently on offer. Informal programmes might take the form of bridges to employment, "second-chance", and "safety net" opportunities. The importance of the *teacher factor* surfaced as before. One Minister identified a vital accompaniment to a larger degree of flexibility in the organisational rhythms of learning to be a major shift in teacher perceptions so that they respect young people "as they are" rather than repeatedly blame lack of school success on the failure of individuals to adapt to the courses on offer. The reorganisation of teachers into teams may also be a condition of meeting special needs more effectively.

A practical focus predominated throughout the debate, with the emphasis on what education and training can and should do in the face of the *social and economic inequalities* that exercise such a powerful influence on the achievements of pupils and students, rather than to view that influence as a reason for lack of action. Nevertheless, the ubiquity and strength of the socio-economic influence on educational outcomes remains the essential backcloth to all efforts to improve the achievements of the weakest sections of student populations. The attention to exclusion and marginalisation, as referred to above, includes concern about the continued existence of poverty and of an "underclass", defined in both socio-economic and educational terms. The situation of *migrants* and *minorities* also elicited particular concern. The socio-economic, community, language, and other curriculum factors already identified come together in complex ways to explain the frequent exclusion and poor attainment of these students. How far the "empowerment" of minority groups to decide their own educational futures and curricula, now proposed from a variety of quarters, might, in some circumstances, exacerbate exclusion or run counter to mainstream reform, was an open question that could not be explored in depth. What is clear is the widespread acknowledgement of the importance of multicultural/intercultural approaches and of the pivotal nature of the pre-primary phase if an impact is to be made on later educational failure.

The evidence on the capacity of *pre-school* and *pre-primary* programmes to "compensate for" the marked differences that exist in the social and cultural backgrounds of young people received differing emphasis and interpretation. Doubts that were common ten to twenty years ago about the influence of early childhood interventions to make a lasting impact on later educational and social careers are now less in evidence – the consensus is stronger about the durable value of a "*good start*". But there are still doubts about the degree to which such intervention can *equalise* chances between the more and less advantaged socio-economic strata, unless the improbable option is chosen of denying the privileged access to early childhood education. There is also a diversity of philosophy apparent concerning the aims and contents of the pre-primary phase. Assertions that "pre-primary" is not at all synonymous with "pre-school", that there should be integration with the primary, and that the educational content of these programmes must not be sacrificed in fulfilment of custodial, child-care functions were made in contrast with the principle expressed that no school curricular elements should feature at the pre-primary level in order that all children can start the primary phase on an equal footing. In addition, some countries report general problems of inadequate funding and a confusing variety of early childhood provision.

Attention was also focused on *higher and adult education and training* at the other end of schooling. Provision at these levels is so different across countries that there is inevitably a

wide variety of priorities aimed at enhancing access and overcoming failure. In some, access to higher education is relatively open but then drop-out and "failure" are widespread, raising serious doubts about the efficiency and effectiveness of what is provided and about the equity of outcomes. In many, higher education still opens its doors only narrowly to the adult student and, despite the improvements that have undoubtedly occurred in some countries, there remain others where the typical student is still young, full-time, and in institutions with relatively low regard for their teaching as compared with their research role.

Reaching the non-traditional, adult student, and meeting the needs of middle-aged and older adults with low levels of initial educational attainment, are now on policy agendas. The emphasis of the discussion was more on the role of higher and adult education than on enterprise training and labour market programmes; Education Ministers tend to perceive the burden of their responsibilities in realising greater equity to lie much more with the former than with training policies. Nevertheless, with the priority now accorded to lifelong learning, there is growing acknowledgement that inequalities of educational attainment become exacerbated, not alleviated, over the course of the life cycle, taking account of all forms of organised learning, including training. There is recognition of the need for greater coherence between the different policies and agencies responsible for education, training, social, and employment matters. One Minister identified a special role for the workplace in this regard, as the key locus for co-ordinating the different efforts for adult learning and human resource development, especially for the less privileged and under-educated.

Chapter 3

THE MINISTERS' COMMUNIQUÉ

The OECD Education Committee met at Ministerial level in Paris on 13 and 14 November 1990. The Chairman was Mr. Javier Solana Madariaga, Minister of Education and Science, Spain. The Vice-chairmen were Mr. Lauro F. Cavazos, Secretary for Education, United States and Mr. Göran Persson, Minister for Primary, Secondary and Adult Education, Sweden.

Prior to the meeting, the Ministers had a consultation with the OECD's Business and Industry Advisory Committee (BIAC) and the Trade Union Advisory Committee (TUAC) in a joint meeting. The discussion was held on the basis of a statement prepared jointly by BIAC and TUAC. Ministers welcomed the constructive contribution which the statement and the discussion made to the preparation for the Ministerial meeting.

The Ministers welcomed the opportunity to take stock of progress since they last met at the OECD in November 1984 and to reflect on the issues to be addressed in the decade ahead. They believe the value of the OECD approach to lie in its ability to relate education and training to the broader economic, social, and cultural environments, in its international comparative base – encompassing industrialised democracies in Europe, North America, and the Pacific area – and in the quality of its policy-related analysis. An underlying theme in this approach is that education and training hold an important key to economic and social progress. Recognising this, Ministers look forward to the results of continued work by the Organisation in the fields of education and training.

Ministers discussed the main challenges of the 1990s, their priorities in the light of these, and the strategies and options available to meet them. They focused on policies to improve the quality, structure, and flexibility of education and training, emphasizing the urgent need to open access further, to allow all to achieve their full potential and to overcome failure, and to realise lifelong learning. There was a substantial degree of common ground concerning the nature of the challenges ahead and the main orientations for policies, recognising differences of approach, institutional tradition and stages of educational development.

Challenges for the 1990s

Ministers recognise that, in the decade ahead, OECD countries will be confronted with new economic, social, and cultural challenges in which knowledge, skills, values, attitudes, and exchange will play a central part. The potential contribution of education and training is thus of critical importance; realising it depends on improving the quality, structure, and flexibility of provision so that it can contribute to change as well as adequately respond to external pressures.

The "human factor" is fundamental to economic activity, competitiveness and prosperity, whether manifest as knowledge and skills or in the less tangible forms of flexibility, openness to inpovation, and entrepreneurial culture. All OECD economies are engaged in a process of structural adjustment and rapid technological development. Employment patterns and work-place processes evolve rapidly. Together, these changes exercise a profound impact on the topography of relevant knowledge and skills and hence on the capacity of individuals, young and old, men and women, to participate in economic life. A growing number of countries report labour and skill shortages, fuelled by demographic downturns for the age groups entering the labour force, thus accentuating the burden of immediate change that lies with older adults and the necessity of the recurrent training and retraining of the labour force. But alongside shortages the unemployment problem remains, though at much higher levels in some OECD countries than others. Continuing poverty gives grounds for concern and young people are among those most "at risk". The dangers of socio-economic polarisation must be tackled. Education and training have powerful links with production, the labour market, as well as social well-being. The task for policy is to ensure that education and training play their full part in economic and social progress.

The coming decade looks set to bring new scale and patterns to international movements of labour and to migration. There are the rapidly developing international skills markets that will themselves be shaped by emerging shortages. The scale of migration calls for close scrutiny of the adequacy of education and training provision to ensure integration for migrants and their children while maintaining their cultural identity. Developments outside the OECD area, in Eastern and Central Europe, the newly industrialising economies, especially those in South-East Asia, the poorer and very poor developing countries, all point to far-reaching change – economic, political, and cultural – in international relations with important repercussions for OECD countries themselves. Global environmental and health problems call for joint initiatives and action. For all these reasons, the international dimension has become integral to national education and training policies.

Today's "information societies" call for citizenries capable of understanding and selecting discerningly from the enormous quantities of information generated from all sources, including the media. The exercise of democracy presupposes a well-educated population, participating fully in political and community affairs. The time available for leisure and cultural pursuits is on the increase, most especially for the growing numbers of older citizens, many of whom now enjoy longer and healthier periods of retirement. Changes in family, community, and social structures give a new importance to the learning of values. Ensuring the very quality of life and the environment is a major challenge for the 1990s and into the 21st century.

These changes and challenges make learning pivotal to contemporary progress. Initial education and training systems need to be of such universally high quality that all young people secure the foundation of knowledge, skills, understanding, and values to enable their full participation in meeting these different challenges. To do so, they should acquire the ability to learn and relearn. Widespread and flexible opportunities need then to be available to build on that foundation through education and training, formal and non-formal, organised recurrently in accordance with the broad aim of lifelong learning. These ambitious aims raise the broad issue of financing of education and training, against the background of continued constraints on public budgets.

Policy orientations

Ministers identified the following aims and orientations as common across the OECD area as a whole, recognising that specific policy goals and procedures will continue to be shaped by national and cultural circumstances.

i) *A high quality start to lifelong learning – the crucial role of initial education and training*

Without securing the foundation of advanced knowledge and skills, combined with the appetite and ability to learn afresh, in all youngsters, the other ambitions for education and training will founder. The quality and relevance of initial education and training are thus crucial. They should seek to provide teaching tailored to the needs of all pupils and students, the gifted as well as the under-achiever, in an ethos of high expectations, application, and co-operative learning. Effective schooling cannot be developed in isolation. Early childhood education is important for subsequent success and so schooling should build on the influential pre-school years. Effective schooling should lay the ground and motivation for continued learning afterwards in all post-compulsory and post-secondary settings. Effectiveness is strengthened through close partnerships with parents, the local community, the employment sector, and other policy agencies. All young people should have access to education and training opportunities – general and vocational – that provide a solid foundation for adult and working life.

ii) *Quality and access in a lifelong perspective*

Quality provision should be as much a feature of vocational programmes, higher education, enterprise training, and adult education as it is of schooling, which has been the predominant focus for qualitative improvement in many countries to date. Together, these different programmes and settings should constitute a comprehensive array of opportunities to meet the multitude of learning needs of all beyond school age. Provision must be extensive and diverse and access to it widened. Adults require ready and recurrent recourse to programmes that further develop their knowledge and skills, compensating, where necessary, for inadequacies in their initial education, and that allow them to participate actively in today's rapidly changing labour market and society. In this, vocational and higher education as well as the employment sector have a critical role to play. Vocational education and training, in partnership with the employment sector, must enhance the base of relevant knowledge and skills and retrain displaced workers. Higher education is strategically placed to contribute to lifelong learning through the provision of teaching and research, initial and recurrent education, academic programmes as well as those oriented to wider employment and community needs. The growing and more diverse demands on this sector call for continuing review of its structures, funding and performance.

iii) *Education "for all" implies priority for the educationally under-served*

To extend the benefits of education to all makes economic sense as much as it accords with social and educational equity; countries cannot afford to leave large pools of talent untapped. This implies targeting the provision of education and training to the different groups of under-served students and trainees and ensuring that they are given special attention so as to acquire the qualifications that permit full participation in economic and social life; in this, public policy has an especially important role to play. Those with disabilities should have full

access to learning opportunities that stretch their talents and broaden social participation. Minority groups will flourish in learning environments that promote both pluralism and equality of opportunity. There is the continual problem of the socially deprived; for these, education and training can make the difference, most promisingly through integrated strategies and local partnerships with the other economic, labour market, and social policy partners. Under-served adults deserve special attention, particularly those threatened by unemployment and the already jobless, women "returners", middle-aged and older adults, minority workers. For access to be widened so that all may participate on a lifelong basis, different forms of student support and financial entitlements, especially for the disadvantaged student or trainee, should be explored. A universal problem is that those with low initial education attainment levels tend to show little interest in returning to organised learning – participation by adults continues to be dominated by the already-educated. Measures should be taken to encourage all adults actively to learn throughout their lives.

iv) *Overcoming illiteracy*

The continued existence of illiteracy is unacceptable. This applies to illiteracy in the traditional sense and in the new forms generated by scientific and technological change. A minimum measure of the success of schools is that all students have mastered a degree of literacy to permit them to participate actively in society and the economy. But no matter how well they so succeed, competences erode without opportunities for their continued use and, increasingly, their constant renewal. Post-compulsory and continuing education and training should ensure that literacy skills are maintained and improved. Adult literacy programmes will always have a key role to play, especially in those countries and for those sections of the population suffering high levels of illiteracy. The employment sector, including the workplace, must also shoulder its own responsibilities in ensuring the maintenance of literacy, which is the minimum basis on which the more advanced human resource capacities depend.

v) *The need for coherence and focus to avoid curriculum overload*

The increasingly rapid growth of knowledge and the broadening range of education's clienteles and responsibilities now bring curriculum reform centre stage. The demands on curricula today are imposing: they must incorporate content and methods of learning, knowledge and skills, the transmission of culture and values as well as contemporary change. The widening range of tasks and clienteles call for a rich diversity of offerings and of teaching methods, including the use of new information technologies. They should be so organised as to enhance the learning process and avoid inequalities of prestige between the different tracks and programmes and to discourage biased choices such as those reflected in patterns of male and female participation in the sciences and the humanities. The entrenched distinctions between the "general" and the "vocational" blur as all programmes are confronted with the need to develop both theoretical content and relevance to future occupational and educational careers. Diversification of offerings thus accompanies convergence of purpose – the aim is to develop programmes that meet the talents and interests of all pupils, students, and trainees. To avoid incoherence and overload, the special tasks and missions of each level should be clarified. It calls, in particular, for the review of what to include in the foundation of initial provision and what best should be postponed to subsequent further, higher, and recurrent education and training.

vi) *Improving the quality and attractiveness of teaching in education and training*

Expert, motivated, flexible teaching staff are the most vital component of high quality provision, whether in schools, vocational, further, or higher education, or in other forms of organised learning. The teacher shortages foreseen for many countries in these different settings in the 1990s, that are likely to be exacerbated by the ageing of staff and competition from other job sectors, are thus of the utmost gravity. Improvements in rewards, career opportunities, initial and in-service preparation, status and prestige can all contribute to the aim of attracting high quality recruits, whether these are from higher education, trained but currently inactive, or from other occupational backgrounds. Retaining the most talented practitioners in teaching posts and leadership positions is equally important in promoting effectiveness and avoiding shortages; in this, it is important to ensure that women teachers are able to develop their teaching careers to the full. High levels of commitment and professional performance will be expected from teachers in return.

vii) *Information and data – preconditions for sound decision-making*

Well-developed information and guidance systems about options and qualifications are required – for pupils, students, and trainees but also for parents, the employment sector, and the wider community. The potential of information and communications technologies should be further exploited as an important element of such systems. Sound, comprehensive education and training statistics, widely available, are prerequisites of accountability and informed policy debate. At present, they tend to be especially weak in the fields of early childhood provision, private education (whether publicly subsidised or not), labour market and enterprise training, and adult education. The coverage of data and national classifications should be kept under review so that comparable cross-national statistics and indicators can be constructed, available for the majority of OECD countries.

viii) *Evaluation and assessment – identifying progress, diagnosing problems*

Evaluation and assessment – of students, trainees, institutions, and the system as a whole – should constitute an integral component of policy and practice. Good education and training depends on the evaluation of progress and the identification of shortcomings. It is important that procedures for student assessment should be sensitive to agreed curricular goals and not detract from teaching and learning through the imposition of an unrelated set of procedures. Similarly, procedures for teacher appraisal, where these are implemented, should have the enhancement of professionalism as their foremost objective. Certification, the most public form of student assessment, should provide clear information about the positive accomplishments of students useful to all, including employers, rather than confirm failure. The employment sector in turn should play an active part in the design and updating of qualifications.

ix) *Research and innovation need further development*

In general, the level of investment in R&D in education and training is far lower than in any other sector of comparable size. The potential of educational research as an integral element of improvement remains largely underdeveloped, whether at the national, regional, or local level. Traditional academic research has its own special part to play. More important still, much R&D needs to be grounded in practice, involving staff and institutions, whether individually or collectively, in a constant process of diagnosis, comparison, and analysis. To achieve this, experimentation and innovation should be given strong support.

x) *Enhancing the international dimension of education and training policies*

Increasing interdependence – political, economic, and cultural – is a feature of the modern world and raises a number of issues for education and training policies. The rapidly developing international skills markets place a special premium on the acquisition of foreign languages for individuals, enterprises, and countries as a whole; success in this depends critically on education and training systems. The mobility of skills calls for close attention to be given to the cross-national comparability and transferability of qualifications and the possibilities for access and exchange between countries – for pupils and students but also for teachers and administrators. The comparison of research findings, educational indicators, and practical experience across countries becomes increasingly relevant to policy formulation. The OECD should play a key role in facilitating such comparison and exchange.

xi) *Financing high-quality education and training for all*

Realising high-quality education and training for all depends essentially on adequate investment in the education and training of the young and in the recurrent education and training of adults. Low levels of capital investment in many countries contrast with the ambitious targets and tasks for education and training. Despite the recent attention that efficiency has received, there remains considerable scope for the better deployment and management of resources, including through various forms of institutional management and the appropriate exploitation of information and communications technologies. Buildings and equipment can be used more intensively, especially by the wider community. Change may well require the redeployment of resources, including their redistribution between different levels, programmes, and sectors of education and training. More far-reaching options still may have to be considered during the 1990s as, with burgeoning costs, redeployment by itself may well be insufficient. New approaches to the financing of post-school education and training must be considered in which all the different elements – public and private, national, regional, and local, individual and institutional as well as the employment sector – are entered into account.

Towards learning societies

Building on the progress already made, the 1990s should be a decade of continuing reappraisal, modernisation, and reform, recognising the scale to which the provision of education and training has grown and the new responsibilities with which they are charged. The challenges of the 21st century will not be met in a spirit of "more of the same". For the reform process to be most effective, the achievements of education and training need positive recognition. Policies and programmes organised by the established education and training authorities should be actively co-ordinated and developed in partnership with all the other sources and agents of learning, particularly at the local level, and this is also recognised in the OECD "New Framework for Labour Market Policies" (in *Labour Market Policies for the 1990s*, OECD, Paris, 1990). This is not solely for governments; the roles and responsibilities – for the different authorities, the social partners, and individuals – may need to be redefined. The aim is to encourage all individuals to learn actively and continuously throughout their lives.

Part Two

HIGH-QUALITY EDUCATION AND TRAINING FOR ALL: THE ANALYTICAL BACKGROUND

INTRODUCTION

This part of the volume (Chapters 4 to 9) was the main analytical report presented as background reference to the Ministerial meeting. It addresses some of the major issues and challenges confronting education and training systems today, against the background of the changes taking place in the economy and society more broadly. The analysis of current developments and future needs suggests that some fundamental reflection on the aims and organisation of learning in OECD countries may be called for. At present, large sections of education and training systems are heavily bureaucratic, organised with maximising the throughputs of student numbers and their certification as their uppermost objective. Substantial improvements are still to be sought in the quality, relevance, and delivery of education while far too many among society's vulnerable groups miss out. The report argues that there are powerful economic, social, and political reasons for pursuing the dual ambition of seeking significant improvements in the quality of learning while extending these benefits to all sections of the population. The educational arguments are no less compelling.

The report begins by consideration of a selected number of the economic and social developments (Chapter 4) and educational trends (Chapter 5) that set the background and broad agenda for the 1990s. Chapters 6 to 8 then elaborate and discuss in more detail the two sides of the theme of this Ministerial conference – quality and equity. While a dominant theme throughout is that so much education already takes place outside the formal system and that this should develop apace over the years to come, the discussion is, nevertheless, oriented to the particular contribution of the established education authorities to the larger whole of maximising learning efforts in OECD countries. Chapter 9 summarises the main points raised in these chapters, and poses a series of "open questions" for policy in the decade ahead.

The call for change should be dissociated from the negativism that has typified so much educational debate. Even from a positive starting point – that educational professionals work hard in the face of rapid change, and burgeoning demands to make sense of their mission and the messages coming in from all directions – the thrust of this report is that such efforts may no longer be adequate for the complex world of today and tomorrow. The continual grafting of *additional* responsibilities on to familiar institutional forms means that the limits of tolerance and responsiveness could well be in sight. New departures may well now be what is needed.

Part of the problem lies in the very term "education". In common parlance, this is synonymous with what takes place in *schools*. To the informed discussant and to policy-makers, of course, the term embraces the broader post-compulsory and post-secondary spheres. So specific is the usual association of the term "education" that the additional words "and training" are frequently appended to denote a general view. The narrowness of the common association between education and schooling introduces major distortions to policy debate. The education system, and schools in particular, attract disproportionate criticisms when there is the

perception that all is not well, with negative effects on the morale of those involved. They are subjected to endless reforms in efforts to get things right. But other agents and sources of learning are no less responsible for the generation of knowledge and skills and the maintenance of culture and need to shoulder those responsibilities when shortcomings are identified. A broad vision is needed that seeks to maximise the contribution of all the different parties in the enterprise of learning.

The themes of positive support, co-ordination, and partnerships underpin the arguments presented in this report. OECD countries are, more than ever, reliant upon the initial education sector to provide in youngsters the foundation for all that follows – as workers, family and community members, citizens, decent human beings. There is need for a flourishing culture of learning and education for all citizens thereafter – lifelong learning. This will call for co-ordination and partnerships between the traditional government sectors – education, training – and industry, the labour market and employment, social policies, health and the environment, and, of course, finance. It will call for greater co-ordination and streamlining between the different levels that comprise education and training systems, if efforts to strengthen schooling and realise recurrent education are to succeed. It must embrace the different partners at the national and local levels – schools and colleges, the social partners, parents, communities, interest groups, and the powerful organs of the media. And, increasingly, the international dimension – co-operation and exchange, and the reconciliation of international understanding with specific cultural identities – becomes crucial. Such a context of co-ordination and interaction is precisely how those responsible for manpower and social policies view the framework for the labour market policies to be developed and promoted in the 1990s (*Labour Market Policies for the 1990s*, OECD, Paris, 1990). Agreeing that there should be greater co-ordination and a spirit of partnership is a relatively straightforward matter. Far more complex are the concrete questions of how to maintain coherence and equality of opportunity when provision and decision-making are decentralised and diversified.

Chapters 4 to 9 concentrate on presenting the main arguments, drawing on evidence to support them where necessary but eschewing either a description of trends or a synthesis of policy developments across all the fields on which they touch. They have thus been complemented by the Statistical Overview that comprises the rest of Part Two of this volume. This section presents charts and tables, drawing on a variety of sources, to give a general view of facts and trends in education, training, the labour market, as well as demographic developments. It is described as "illustrative data" because strict comparability tends to be limited by the usual problems of international differences in classification and measurement and by the variety of sources drawn on. It is, nevertheless, a useful overview of recent statistics.

Chapter 4

OECD ECONOMIES AND SOCIETIES IN A STATE OF CHANGE

It is natural within the OECD context to relate policies for education and learning firmly to their economic, social, and cultural environments. In fact, such a perspective is a natural one no matter what the context. Education (used broadly to include directed learning of all sorts) is an integral characteristic of contemporary societies and economies. Its contribution to prosperity and the quality of life is so essential and yet so manifold as to defy easy conceptualisation, let alone measurement. Its own vitality depends in turn on the support and stimulus of its surrounding environment. Education construed as an activity that takes place apart from the society, economy, and culture in which it is located represents an arid and mechanistic vision.

With these considerations to the fore, to begin with a discussion of contemporary social and economic change is to reject two opposing but equally simplistic assumptions. First, it denies that education is about "the pursuit of knowledge for its own sake", if by that is understood that policies should support disinterestedly the exploration of whatever avenue of enquiry that human curiosity can devise in complete detachment from the world around. And questioning that conception of education calls for the reappraisal of the traditional distinction between the *general* and the *vocational*. Second, it rejects a rigidly instrumentalist view of education, which would seek to fashion it according to given manpower needs, thereby subjugated to them. Even for economic ends, education must be a much more diverse, creative, dynamic enterprise than the instrumentalist allows. It is even a premise of this chapter that to isolate the economic "ends" or "benefits" of education can itself be misleading. Just as the economic, political, social, and the cultural are closely intertwined at the macro level, so for individuals are they inextricable in terms of human knowledge, skills, values, and attitudes.

Demographic developments

The variables of demography constantly change, as post-war educational planners know only too well through trying to cope with waves of rising and declining numbers of youngsters in the different levels of education systems. The impact of demographic change is now being widely felt across the spectrum of social and economic policy spheres, with every prospect that established practices in many areas – whether education, health, work and the labour market, retirement, or taxation – will be profoundly affected in the years to come. The relationships are interactive: the vagaries of demographic trends in births, deaths, and population flows are as much caused by as causing change in those related spheres, and current concerns acquire their urgency precisely from those interactions.

The OECD conference on "Demographic Influences on the Labour Market" held in December 1989, summarised the situation thus:

> "The patterns ... are neither smooth nor exactly coincident among OECD countries but the resulting slowdown in the growth of the population and the labour force, their changing structure, and their eventual decline in size in many countries, are of concern everywhere."[1]

Established education and training systems feel the impact in familiar ways: rising numbers of births again in some OECD countries after years of decline imply new directions for the redeployment of resources in schools, decreasing cohort sizes of traditional further and higher education age hasten the search for new student clienteles, the ageing of teaching staff and the prospect of labour shortages elsewhere in the economy, bring new headaches concerning teacher shortages, perhaps on a very serious scale (see Chapter 7). Important though these effects are, the impact of demographic change on policies, including those in the educational sphere, is considerably more wide-reaching. Skill and labour shortages, with falling numbers "coming of labour-market age", arouse particular concern in many countries at present, though often in combination with persistently high unemployment levels:

> "In a number of countries in recent years, among them Austria, Belgium, Germany, Spain, Switzerland and the United Kingdom, the number of notified vacancies is at or near the highest levels it has attained over the last fifteen years, yet unemployment rates remain higher (sometimes substantially so) than their lowest levels over this period. In France, vacancies have been higher at other times, but business surveys show a higher proportion of firms reporting general labour shortages in 1989 than at any time since 1979; here too unemployment has failed to fall back to previous levels. In several countries where unemployment rates remain high relative to those prevailing in the late 1970s (Austria, Belgium, Germany, the Netherlands, Spain and Switzerland), unemployment has in fact receded significantly in recent years ... Employment growth in these countries, at least to 1988, did not appear to be affecting the status of many unemployed persons, who continued to experience problems leaving unemployment, even as the growth of the working-age population was slowing down and labour and skill shortages beginning to manifest themselves."[2]

While most countries are experiencing a growing or stable proportion of the population in the age bands corresponding approximately to adults of working age in the immediate term, the longer-term prospects of ageing populations are quite different. In the early decades of the 21st century, the size of the "working-age group" will also fall, both relatively and absolutely. For the time being, attention tends to focus on such alternative sources of labour supply to meet shortfalls as qualified women who have left paid work for family reasons. Over the longer term, the search may well need to spread further afield still, including beyond national boundaries as well as to utilise more effectively the potentially very large supply of labour represented in some countries by the unemployed and the underemployed.

Looking instead at the situation of older members of the population, ageing represents social and economic change of important dimensions. Many more older, healthier, relatively affluent citizens are living alongside their children and grandchildren. Greater longevity and more effective medical treatment swell the numbers of the frail elderly increasing the demands on health services as well as on community and family care arrangements (predominantly borne by women). Growing numbers of retirees relative to the labour force pose searching questions about existing pension, tax, and financing arrangements, even, perhaps, about the

BEST COPY AVAILABLE

conventions and very status of retirement[1]. It would be fair to assert that such questions have to date been addressed on only a tentative, initial basis in most OECD countries.

Education is a matter central to the issues and changes sketched out above. The capacity of Member countries to meet labour and skill shortages and to ensure that new sources of labour supply are equipped with the requisite knowledge and skills is essentially a question about the nature and organisation of available learning opportunities in OECD countries. Older citizens, whether as the fully retired seeking meaningful activities in later life or whether engaged in economic or community activity on a full- or part-time basis, represent an important student clientele the potential of which, to reiterate, has scarcely begun to be tapped. Indeed, the possibility of older people in general leading active lives depends, in no small measure, on meeting that potential. The worsening financial dependence ratio of the non-active to the active over coming years could well affect education profoundly. In very concrete terms, growing pressure on social expenditure and increasing demands for pension and health spending may well put public education budgets under considerable strain exactly at the time when the list of items calling for extra funding there grows too.

A more general implication for education can be identified. The changing distribution of age groups in the population, as it becomes manifest through its impact on labour market and social policies, invites consideration of a concomitant alteration of the distribution of learning opportunities over the life cycle. With labour and skill shortages, growing numbers of older and elderly citizens and eventually declining populations, the wisdom of established arrangements is called in question. How sensible is it, in particular, to continue to extend ever longer the initial education and the retirement phases while the period of working life is compressed into a shortening intense period itself involving an increasing number of career changes? To reverse such trends means, in important measure, to take much more rapid and active steps to realise widespread recurrent education opportunities for lifelong learning while ensuring on grounds of equity that all receive the foundation on which can be built such further learning beyond the initial phase of education and training.

Structural and technological change

The dimensions of change

Structural change, as the Education Committee's statement on *Education and Structural Change*[1] observes, has been a permanent feature of modern societies at least since industrialisation but now OECD economies need to adapt flexibly and rapidly as rarely before. This has been reflected in the evolving structure of occupations and work. In such evolution, education and training are prime catalysts of successful change and they are profoundly affected by the new contours of their economic and technological environment. Were the challenge that of ensuring transformation from a present steady state to another in the future, it would be a relatively simple matter to get a measure of the task ahead. The situation is not so simple nor so clearcut, however: education and training must generate and cope with *continual*, increasingly rapid change – for economies, enterprises, individuals – while at the same time meet demanding responsibilities for ensuring the continuity of cultural values, traditions, and community identities. The importance of the issues related to technological development has been recognised within the OECD's own work by the establishment of a high-level experts group on technology and the economy (TEP). They considered, as one of their points of departure, that "an adequate supply of appropriately educated and trained human resources is one of the

critical forces driving technological advance''. They also considered that of the many different issues so raised, three are outstanding: skill gaps, potential labour market dualism, and the growing international mobility of skilled labour[5].

Change in occupations, work, and technology can be grasped in many ways. At a highly aggregate level, it is shown by the sharply rising share of civilian employment in services: from approximately 45 per cent for the OECD area as a whole in the mid-1960s, it had grown to over 62 per cent little more than twenty years later (and to approximately two-thirds or more in the North American region, Australia, Belgium and the Netherlands, the Scandinavian countries of Denmark, Norway, and Sweden, and the United Kingdom)[6]. That indicator in turn underestimates change insofar as many jobs in industry, for example, have been redefined towards service functions, though it must also be remembered that much employment in services does not involve actual contact with customers or clients in a ''service'' capacity. The examples serve as a reminder that the aggregate measures are much better indicators that change is occurring than of the actual nature of change as it relates to the agendas of educational policy.

In the process of change, industries experience growth or decline. Semi-conductor production, for example, has now replaced the steel industry as the world's largest consumer of capital (in 1987, OECD countries' investment in the area was about $7 billion)[7]. The growth of the ''information'' and ''knowledge'' industries has been striking. One expert has identified as a central feature of contemporary economic life that ''knowledge work'' has become the economy's growth area such that productivity is increasingly determined by the knowledge and skill that people bring to their work[8]. For another, the change is best expressed as human knowledge having replaced machines and plant as the moving factor behind productivity change[9]. Technological development – a constant fact of economic life – has taken on a radical new dimension with the spread of the pervasive generic information technologies (ITs) based primarily on computers, microtechnologies, and telecommunications. So pervasive are they that they have been characterised as constituting a new ''technico-economic paradigm''. ''Knowledge'' (and hence education and training in all their forms) is central to these developments, and to successes and failures therein; what is more difficult to establish are their full educational implications.

In seeking to clarify the implications, it is necessary to avoid reaching hurried conclusions on the basis of the headings and labels commonly deployed. Just as many of the jobs in services are not necessarily about ''service'' to customers and clients as such, so would it be mistaken to assume that all or even the majority of jobs in the ''information industries'' are characterised primarily by the exploitation of information technologies. The growth of services and the changing content of work warns too against assuming that the traditionally strong industrial/craft programmes are priorities for growth when vocational and technical education are expanded. The fact and pervasiveness of economic and technological change, and the central role identified for knowledge and skills as a factor of that change, certainly invite review of the capacity of education and training provision to ensure flexible learning on a lifelong basis. The ubiquity of change is a major factor suggesting that strengthening recurrent education involves much more than straightforward redistribution of learning opportunities between children and young people, on the one hand, towards adults, on the other, difficult though this undoubtedly is. It is instead a matter of reinforcing significantly *both* initial and recurrent education, while identifying more successfully than hitherto the particular strengths and missions of each.

No less important is the role of education in quite a different capacity in the ''knowledge-intensive'' world of today – research. The fact of rapid change rules out the stance of assuming that present research capacity can be sacrificed so long as the fruits of past enquiry are still being exploited. The cost of such myopia only becomes evident too late, i.e. in the middle and

long term. How best that research should be organised, and the optimum part that education – especially higher education – should play, remain outstanding questions.

The "micro level"

The "macro" perspective permits the broad problematique and the distributional side of economic and social change to be grasped. Nevertheless, in the words of the OECD Sundqvist report, *New Technologies in the 1990s: A Socio-economic Strategy*, "the micro level is decisive". Particularly for education and training, it is at this level that the broad transformations are translated in practice in terms of knowledge, skills, attitudes, and approaches. Examination of changes in enterprises shows that the crude "manpower forecasting" approaches of the past are woefully inadequate for today's world. Apart from being undermined by the fact of change, were even technological development alone taken as the basis for educational planning (which is itself very restricted), it means catering for uncertainty, open-endedness, and diversity:

> "Far from dictating unique or even 'optimal' modes of division of labour or specific forms of work organisation, information and communication technologies tend to increase the range of organisational options at all levels of individual and collective activity. It is precisely this increased degree of liberty, and the related potential of improved competitiveness which produce growing pressures for fundamental changes in the traditional 'technological paradigm' characterised by Taylorist forms of division of labour and work organisation ... The educational implications of these developments are linked to the crucial role of human skills and motivation in making the fullest possible use of technological potential and in improving flows of information and communication both within economic organisations and between producers and clients."[10]

Certain more detailed implications of these observations for curricula will be discussed in Chapter 6. One further characterisation of economic change of special pertinence to enterprises in OECD countries is the increasing emphasis on the production of *high-quality* goods and services. The pressures of general affluence and the exercise of consumer demand and choice, and the growing competition from other world regions, place a special premium in OECD countries on quality outputs. This provides one compelling rationale for assuring the continued supply of high quality knowledge and skills, and hence of education, as key factors of production in OECD countries, though, of course, there are equally powerful educational arguments for pursuing educational quality. Two aspects of raising quality in education are compounded in this argument. There is the advocacy of excellence, in individuals and throughout the population of learners. And there is the clearer identification of what "quality" actually means in terms of the desired outcomes of education. The preoccupation with standards in the abstract can lead to the neglect of these standards and qualities actually being sought after. If that imbalance is redressed, the two aspects come together. It is then that the pursuit of quality can become the promotion of *relevance*.

The labour market

The changing nature of work described above, and the sorts of knowledge and skills implied by it – creative, co-operative, informed, multi-skilled, problem-solving, open-minded – indicate a generally positive picture in contrast with the pessimism of the "deskilling" thesis which has enjoyed certain currency over the past twenty years or so. This is reinforced through

taking account of the fact that unemployment rates have tended to fall since the mid-1980s – albeit with the different regions of the OECD experiencing widely varying unemployment levels (in Europe, and especially in the southern countries, they stand well higher than in the United States and Japan). The easing of the previously dramatic problem of youth unemployment paves the way to a more active role for education and training policies than the essentially remedial reaction that has so dominated over the past decade or more. All this seen in the light of the need to meet emerging shortages in the labour market, the basis is laid in the 1990s for setting ambitious agendas for education policies. Against this generally positive outlook, however, are a number of complicating or countervailing factors; the path ahead is not an easy one.

Unemployment

One such problem is the continued existence of unemployment itself, even alongside the labour and skill shortages referred to above. Levels still stand at 8 per cent or more in Belgium, Denmark, France, Ireland, Italy, Spain, and Turkey, reflecting a higher aggregate unemployment rate for OECD European countries overall in 1990 than in North America or the Pacific countries[11]. Despite the proliferation of training and transition programmes in recent years, the youth unemployment problem remains serious in some countries, and is still acute in one or two (unemployment for 16-24 year-olds stood at over 30 per cent in Italy and Spain in 1989). Alongside the immediate trends and effects is the long-term side of unemployment. This includes the phenomenon of long-term unemployment itself. In ten of the 19 countries for which the OECD had data for 1989, more than half of the male and of the female unemployed had been jobless in excess of 6 months[12]. There is the phenomenon of what has been called "the lost cohort" – the generation of young adults who were leaving education for the labour market during the late 1970s and 1980s when the youth unemployment problem was at its worst: how well have they been able to make good the loss to acquire marketable knowledge and skills? And there are the older workers, most vulnerable to redundancy and lay-offs in the face of structural change. Their learning and training needs are of particular importance if countries are to make full use of all the talents and experience at their disposal.

The considerations for education and training policies arising from these observations and trends have a general application beyond the unemployment phenomenon *per se*. All the chapters of the report, with their dual emphasis on quality and equality, are relevant to the particular plight of the unemployed. But one feature of the relationship between educational attainment and the experience of unemployment deserves attention at this point. An OECD analysis of the educational attainment of the labour force reported:

> "In general, the relationship between educational attainment and unemployment does not appear to be a linear one with overall increases in educational attainment leading to overall reductions in unemployment. Instead, the largest difference in experience is usually found between the least educated and everyone else (p. 67)."[13]

In other words, as demands for skills grow and as the number of job openings in the less skilled occupations shrinks, the position of those with little to show for their years of schooling is thrown into sharp relief. Even with emerging shortages, the position of those at the bottom of the ladder is exacerbated as the educational levels attained and demanded continue to grow. Consideration must be given to solutions that do not imply ever-longer extensions of initial education as this, apart from other reasons for reversing the trend, puts the most vulnerable still further behind.

The position of women

No discussion of the relation between labour market developments and education can omit from account the rapidly changing, while still highly distinct, situation of women at work. The increasing female engagement in paid work is one of the most clear-cut of all socio-economic trends over recent years; approximately two-thirds or more women of "working age" were in the labour market in 1989 in Canada, Denmark, Finland, Norway, Sweden, the United Kingdom, and the United States[14]. The analysis for the OECD report on the "New Framework for Labour Market Policies" identified as crucial at least two other major life cycle aspects of the changing nature of women's working situation through which to understand the overall trend increase:

> "... a fall in the proportion of women responsible for the care of young children and a rise in the number of women carrying the 'double burden' of professional and child-rearing responsibilities (many of whom work part-time). As a consequence, a higher proportion of the female workforce is building up long periods of continuous labour market experience, and hence is in a position to establish and maintain higher-level skills (p. 70)."[15]

The same OECD report also reported a narrowing of earnings differentials between men and women since the 1960s but with a significant shortfall still from parity. Equally, clear-cut occupational segregation persists while in most countries women now have higher measured unemployment rates than men. The picture is thus a mixed one.

The relations between these developments and education and training are manifest and compound. If women are today perceived in some countries as especially important to meet emerging shortages, then education, training, and labour market policies must address fully the present distinctive patterns of male and female choices in schools and colleges in ways which both support female advance into key scientific and technological fields and which confront the reality that, at present, labour markets tend to sell women well short in terms of recognition of their existing qualities and qualifications. Current opportunities for training and retraining should be scrutinised to ask whether women enjoy an adequate share of what is on offer and whether that is sufficient to meet the demands of today's rapidly changing labour market. And women's position in the labour market and the "double burden" referred to in the quotation above raise searching questions about the availability and organisation of child care arrangements and education. There is now a clear need to review such arrangements given the scale of the transformations that have occurred in education, women's role in the labour market, and the changing patterns of family life[16]. The challenge is to find solutions that benefit *both* working women and the children themselves without the needs of the one being merely subjugated to those of the other. To avoid this, policy debate and formulation will have to confront deep-seated social attitudes if the economic and domestic roles of the other key players in all this – those of *men* – are to be brought fully into the picture.

Education and training policies are affected by these changes and issues in an even more immediate fashion. They are key features of the professional labour market that touches education most directly – that for *teachers*. Women represent both a vital source of teacher supply, whether as new entrants or as "returners", and a grave loss to the profession if they are tempted in significant numbers to those other job sectors which are stepping up the search for new recruits. The position of women is thus a matter of central importance to educational policies, whether these are about children or older people, students or staff.

The diversification of employment patterns

A further qualification to a positive picture of movement to "skills intensive" economies derives from the growing diversification of employment patterns. Part-time working has already been referred to in the previous section as a significant variant and one which is concentrated largely among women. In all the OECD countries for which there are data, women comprised between two-thirds and 90 per cent of all part-time employment in 1990. Part-timers make up 40 per cent or more of all women in employment in six of these countries[17]. Whatever the benefits of flexibility this type of scheduling might offer, the problem remains that it is associated with reduced opportunities for training, retraining, and career development. This is the general problem that the diversification of employment patterns brings. A number of developments are associated with growing diversification. There has been a proliferation of smaller enterprises, especially in the service sector, over recent years. Countries have witnessed the growth of fixed-term contracts and subcontracting, as well as part-time working. Expensive technical processes often require continual manning and shift working while enterprises offering services look towards less routine forms of the scheduling of work; each can imply some increase in the numbers of "untypical" workers. A novel twist in recent years is that "unorthodox" work patterns are no longer predominantly associated with unstable, low-income, secondary labour markets. Increasingly, it is characteristic of the very highly skilled and expert, as they and the companies that sub-contract to them seek enhanced flexibility.

The problems observed concerning the lack of training and retraining opportunities for women part-timers is thus a matter of more general application as growing sections of the labour force adopt "untypical" working schedules. Some of these are the disadvantaged, those who have traditionally been badly served of opportunities for their own development and socio-economic improvement. Yet increasingly, it applies across the spectrum of working people, men and women, the expert to the unskilled. The questions raised by diversification are far-reaching. How to develop widespread opportunities for continuing education and retraining for the growing numbers of adults on untypical schedules? Which policies will prove most effective to meet the special needs of the disadvantaged? What role in all this for enterprises – how far have immediate gains in flexibility been dependent on a human resource base rendered fragile by the desire to shift the costs of its development to others? Should new forms of partnerships and funding be created precisely to give a more secure foundation to human resource development in the light of the diversification of employment patterns? What is the proper role for the public education and training authorities so that they can make a full contribution to active policies rather than be the providers of programmes of last resort that enterprises do not wish to contribute to themselves? These are some of the questions that underline the need for a reappraisal of the relationship between private enterprises and the public education and training authorities. The recent "New Framework for Labour Market Policies" developed by the OECD places considerable emphasis on the importance of education and training and on the need for the more effective integration between the different policies and sectors involved. In the words of the report:

> "Effective job training depends upon a strong commitment by employers and the co-operation of employees; it also depends upon every worker having acquired a sufficient foundation of general education. Better co-operation between enterprises and education and training institutions will be required to cope with evolving skill requirements and their increasing complexity (pp. 8-9)."[18]

The international dimension

The international dimension has an undeniable and growing importance. It runs through many of the issues already addressed in this chapter. It is integral to policies aimed at ensuring the continued development and supply of expertise in international skills markets, to the search for labour beyond national frontiers in the face of declining populations and labour shortages in OECD countries, and to the efforts to raise educational quality in the hope of maintaining position in worldwide economic competition. The ease and incidence of mobility and travel means that national frontiers are increasingly permeable and the limits imposed by distance are correspondingly reduced.

The features of international relations are themselves in the process of change of almost breakneck rapidity. Eastern Europe countries now come to terms with new-found political and economic freedoms, with consequences in these domains, for themselves and for the rest of the world, including the OECD countries, that are at present impossible to predict except that they will surely be far-reaching. Europe moves towards a new position in world affairs, attendant on economic integration and closer political ties between countries, while the very shape of the European map of association and union is itself in the process of being redrawn. Emerging economic power in Asia, with the rapidly developing Dynamic Asian Economies (DAEs) complementing established Japanese strength, gives the Pacific region growing prominence. The problems that beset many parts of the world outside the OECD area – high levels of population growth, famine and poverty, near economic collapse in many countries in sub-Saharan Africa, Latin America, and parts of Asia, military and civil strife, large-scale illiteracy – are sure to hold long-term consequences for the world as a whole. And outstanding environmental and health problems, such as global warming, widespread pollution, the continued high incidence of fatal diseases such as cancer and AIDS, the production, export, and import of illegal drugs, require concerted international efforts to yield beneficial results.

Some principal features of the international migration of populations command attention[19]. During very recent years, migratory movements have accelerated. The most difficult aspect of this to grasp with precision, by its very nature, involves people entering a host country clandestinely, for some countries in large numbers. They are destined in the main to join the ranks of the underclass with current education and training policies holding little relevance for them except by exclusion. But there have also been growing numbers of people from abroad seeking asylum and refugee status. And there has been growth through the traditional causes of migration – cross-national shortages and surpluses of labour, income inequalities, and family regrouping. Another recent change is the slowing of the return of migrants to their country of origin (where data availability permits such generalisation). Relatedly, there is the continued growth of foreign populations within OECD host countries and the progress, uneven though it is, towards their socio-economic integration. There is thus a complex set of social, economic, and cultural issues for education and training policies arising from international developments.

Certain international movements lie close to the very heart of the educational world. Concerns are being expressed in some countries that vital research capacity and quality staff in higher education are being lost abroad just as ageing and generally buoyant graduate job markets raise new prospects of shortages in the research and academic fields. But the phenomenon is not unique to higher education: school teachers are already crossing frontiers between certain OECD countries in response to market forces and this trend looks set to grow in the years to come.

The need today for curricula to promote foreign languages and the understanding of other cultures is an obvious response to "internationalisation" and one where the records of some countries well outshine those in others. Yet there are thorny questions to be resolved. How far can national or regional identities be aligned with internationalism in an area as essentially cultural as education? How does the difficult balance get resolved between the guarantee of equality of educational opportunity within a country and the recognition, even active support, of cultural specificity for groups such as migrants and their children? How to encourage exchange programmes between countries, for students and staff, that are genuinely useful for both sides rather than being token or marginal? Concerning the flows and conditions of foreign students, the need for balance between competing pressures was highlighted in the background report to a seminar held in April 1990 in Hannover on this subject:

> "There is, on the one hand, pressure for 'integration' and 'collaboration' to provide students from all backgrounds access to knowledge and perspectives in the institutional setting. These pressures contrast with separate thrusts to 'tailor' programmes to the needs of particular groups of students or interests (a 'marketing' of the institution) ... the challenge is to strike an appropriate balance betweeen the need to serve the needs and interests of those in other parts of the world and the importance of developing a truly international view within higher education."[20]

The issues are manifestly more complex still in seeking to identify the role that OECD countries can most usefully play in relation to educational development in the Third World countries.

The social context

To separate sharply the economic, technological, social and the cultural in relation to education is usually artificial and potentially distorting. The "social" aspects and effects of education are not matters apart, as the topics dealt with in this chapter aptly illustrate. Such terminologies can, however, indicate emphasis as in this final section. It discusses several features of education's social and community environment which have neither been highlighted above nor are strictly matters of disadvantage and equity as discussed below.

The "information society"

This is a common epithet to describe our complex, information-rich societies. It is not a precise term but a label capturing the often taken-for-granted fact of the vast quantities of information now routinely generated and circulated. It incorporates the growth of the "information" and "knowledge" industries characteristic of OECD countries and signals the pervasive spread of information technologies (ITs). And it can include the variety of sources of information and changing access to them especially through different media[21]. The issues raised for education are many; they can usefully be divided into those that immediately impact on the educational world and those that raise more fundamental questions about the functions, purpose, and context of education today.

One of the most obvious signs that the educational world has recognised the arrival of the "information society" is the large battery of policies introduced in schools and colleges in OECD countries over the past decade to educate about and exploit ITs[22]. Success has often been mixed through lack of clarity about what the main purpose of the ITs strategies are, through the inadequate preparation of staff, and through inadequate reorganisation of the

learning process to suit the new potential ITs offer. Software has been widely variable in quality with teachers often confused about how best to select among those on offer. The very speed of change of information technologies themselves suggest that serious reflection is needed about how "learning about" them should be reflected in the curriculum for it to be of lasting value to students. OECD studies in this area suggest that the imaginative integration of ITs into the learning process itself offers both exciting new possibilities and may be one of the most effective means of gaining familiarity with the technologies. The rapidity of change, however, does call for the assessment of the very importance of schools in this regard as compared with the education and training that comes later with entry to working life and from then on.

The rapid growth of knowledge raises the spectre of curriculum overload, with schools, in particular, attempting to reflect that exponential expansion through multiplying the options on offer for the young, risking incoherence in the process. Many of the criticisms directed at school systems for tardy responsiveness to new developments are based on unrealistic assessments not only of what is feasible for school systems to take on board but even what is desirable. The mushrooming of knowledge raises sharply the issue of what small portions of it should be included in curricula, how these should be selected, and what emphasis should be given to the habits and skills of learning as opposed to knowledge *per se*. It invites consideration of the very nature of education and of the profile of the professional teacher who can meet the challenges of successful teaching while maintaining familiarity with new developments in education and his or her own specialism, in the face of such rapid change.

The growth of information and knowledge affects not only that which is taught and learnt; information about educational options, and those in the world beyond schools and colleges, grows at a bewildering rate as well. Students and parents are increasingly called upon, quite correctly, to participate actively in making the choices that fashion careers. For such participation to be meaningful, and also for it to be *equitable* and not the province of the already-educated, large amounts of information must be readily accessible. This places a new emphasis on the guidance and pastoral functions in education which probably need to be more fully integrated throughout education than is commonly the case when it remains apart as "advice" or "counselling".

Concerns about the "information society" run much more deeply than its immediate impact on the internal life of schools and colleges. Many express worries about the nature and quality of the information received, especially by youngsters, from the alternative sources of the media, especially television. Some even characterise it as "anti-educational". Fears are expressed about the sheer quantities of time spent in front of television screens, and the impact this has on attitudes, on active approaches to learning or play, or on other cultural pursuits such as reading. It must be recognised that many such developments are now realities of life and cannot be denied or ignored. It should also be recognised that the media have not broken education's monopoly as a source of knowledge, as some maintain, since it has never enjoyed such exclusive status – the family, the workplace, and the community have always represented important loci of learning.

Yet proper recognition should be given, on the other side, to the responsibilities of parents, and to the media themselves, if youngsters acquire bad habits or superficial knowledge. Educational institutions, especially schools, cannot be held responsible for many identified shortcomings and cannot be expected to make good, for example, scores of hours spent in front of television screens, which is primarily a parental matter. And it may be necessary for education authorities to engage in dialogue with the media with the view to improving the learning content of what is on offer for the young. At its best, television offers a fresh,

interdisciplinary, immediate source of learning that can fully complement the school curriculum. The challenge is to exploit it thus.

Changing family and community life

The previous section emphasized the family as an important locus of learning; the growth of public education systems has sometimes downplayed parental responsibilities in this regard. Earlier in the chapter, discussion of the greatly increased involvement of women in the labour market brought out, *inter alia*, that the needs of both mothers and children, as well as families' economies, need to be considered, which is perforce to enquire about the roles and contribution of fathers too. What this neglects, with separation and divorce of growing magnitude and concern, is that lone-parent units are the family settings for many youngsters:

> "Lone-parent families now typically constitute 10 to 15 per cent of all families with children in OECD countries. Ireland, Japan and Spain have been notable exceptions with under 10 per cent up to the early 1980s. The United States has by far the highest proportion – about one in four of all families with children... But these numbers understate the size of the group in one important respect. Many more adults and children experience lone-parenthood ... than are counted at any single time. As a result, lone-parenthood may affect many more people than a snapshot reveals (pp. 9-10)."[23]

This is a development of far-reaching consequence for the emotional and learning environment of children. It places new responsibilities on pre-schooling and schools for socialisation and child care that are rarely addressed explicitly in educational debate. With the proportions of lone-parent families reaching unprecedented levels, these questions should enter more directly mainstream policy discussion.

These changes in family life are one, albeit very important, example of changing social structures which can involve the breakdown of traditional support networks. Conventional assumptions about family background or community support must give way in the face of the more varied, complex configurations that typify modern social life. Such developments hold positive aspects but they can also bring economic hardship and social isolation. The problems are especially acute for those from the less privileged sections of society. Education can no longer take for granted the powerful influence that some communities have traditionally exercised in the socialisation of the young and the support provided to schools and colleges. The upshot is that the education services come to confront responsibilities – for socialisation, child care and welfare, and as centres of community activity in their own right – that represent a radical departure from traditional practice. It is not obvious that such responsibilities can be simply grafted on to existing institutional forms in education.

NOTES AND REFERENCES

1. OECD (1989), "Conference of National Experts on Demographic Influences on the Labour Market: 1990 to 2020", Paris, December.
2. OECD (1990), "Labour Market Trends and Prospects in the OECD Area", *Employment Outlook*, Paris, Chapter 1, p. 17.
3. Some of these issues are discussed in OECD (1988), *Ageing Populations: The Social Policy Implications*, Paris.
4. OECD (1989), "Education and Structural Change: A Statement by the Education Committee" (document on general distribution).
5. OECD (1991), *Technology in a Changing World*, Paris.
6. OECD (1990), *Labour Force Statistics 1968-1988*, Paris, Table 7.0.
7. OECD (1989), *Major R&D Programmes for Information Technology* (Information, Computer and Communications Policy No. 20), Paris, p. 17.
8. P. Drucker (1983), "Quality Education: The New Growth Era", *Wall Street Journal*, 19 July, cited in OECD (1988), *New Technologies in the 1990s: A Socio-economic Strategy*, Paris, Chapter 4.
9. G. Eliasson (1987), "The Modern Industrial Firm", in G. Eliasson and P. Ryan, *The Human Factor in Economic and Technological Change*, OECD/CERI Educational Monograph No. 3 (document on general distribution).
10. OECD (1989), "Education and Structural Change", *op. cit.*, pp. 3-4.
11. OECD (1991), *Employment Outlook*, Paris, Table 1.3.
12. OECD (1991), *Employment Outlook*, *op. cit.*, Statistical Annex, Tables N and O.
13. OECD (1989), *Employment Outlook*, Paris, Chapter 2.
14. OECD (1991), *Employment Outlook*, *op. cit.*, Statistical Annex, Table H.
15. OECD (1990), *Labour Market Policies for the 1990s*, Paris. For a fuller discussion, see OECD (1988), "Women's Activity, Employment and Earnings: A Review of Recent Developments", *Employment Outlook*, Paris, Chapter 5.
16. See OECD (1990), "Child Care in OECD Countries", *Employment Outlook*, Chapter 5. See also OECD (1990), *Lone-Parent Families: The Economic Challenge*, Paris.
17. OECD (1991), *Employment Outlook*, *op. cit.*, Table 2.9.
18. OECD (1990), "Challenges and Opportunities in the 1990s", statement by the Manpower and Social Affairs Committee, *Labour Market Policies for the 1990s*, Paris.
19. OECD (1990), Report of SOPEMI 1989 (document on general distribution).
20. OECD (1990), "New Patterns, New Approaches", working document prepared for the *International Seminar on Higher Education and the Flow of Foreign Students*, Hannover, 26-28 April.
21. The Standing Conference of European Ministers of Education met at its 16th Session in Istanbul in October 1989 to discuss the "Information Society" and its implications for education. Two valuable background documents from that meeting are M. Eraut (1989), *The Information Society – A Chal-*

lenge for Education Policies? Policy Options and Implementation Strategies, and G. de Landsheere (1989), *The Information Society and Education: Synthesis of the National Reports*, both Council of Europe, Strasbourg.

22. OECD reports providing an overview of these developments and changing perspectives during the 1980s are: OECD/CERI (1986), *New Information Technologies: A Challenge for Education*, Paris; OECD/CERI (1987), *Information Technologies and Basic Learning: Reading, Writing, Science and Mathematics*, Paris; and OECD/CERI (1989), *Information Technologies in Education: The Quest for Quality Software*, Paris.

23. OECD (1990), *Lone-Parent Families: The Economic Challenge*, *op. cit.*

Chapter 5

SELECTED EDUCATIONAL DEVELOPMENTS

The changing terms of educational debate

New ideals, new ideas

After the expansionary optimism of the 1960s[1] and the general pessimism that set in during the years that followed, the 1980s have witnessed a certain revival in education's fortunes. There are across many OECD countries signs of renewed public and political belief in education, and of learning in general, as a cornerstone of social and economic well-being. The tenor of debate has, however, been transformed in important respects from a quarter of a century ago. Renewed optimism, in other words, has not heralded a return to the 1960s. There is much greater evidence today in most countries of concern for efficiency, accountability, and assessment, for example, and there has been a marked change in attitudes towards labour market and employment considerations. Many in education in the 1960s regarded such considerations as almost inimical to the educational enterprise (though of course, not all did; it was during these years, for instance, that such approaches as manpower forecasting and human capital investment theory were developed). Today, it is widely recognised that employment considerations constitute a vital aspect, if still only an aspect, of preparation for adult life. Concerning education and training for adults, despite the enthusiasm in some quarters for developing lifelong learning at the end of the 1960s when concepts such as recurrent or continuing education were first elaborated, the present climate has become far more conducive to their acceptance and actual implementation[2]. Doubtless, the demographic and rapid economic and technological changes, as discussed in Chapter 4, have played their part in the reordering of priorities.

Arguably, the demise of the expansionary optimism of the 1960s saw too the decline of enthusiasm for "grand" principles and theories in education. Many such ideas had been constructed in relative ignorance – research in education and the social sciences were then in their infancy and reflective knowledge and experience about the reform process were limited. As it transpired, many such ideas were found wanting when confronted with complex realities and changing conditions. The more excessive claims for education's potency single-handedly to bring about major social and economic change came in for increasing doubts as the 1970s progressed[3]. In any event, irrespective of the economic reversals of the 1970s, with the oil shocks and the high unemployment and inflation levels that most pointedly exposed simple formulas linking educational expansion and economic prosperity, it was always likely that a call would be made to assess the impact of the earlier wide-ranging educational reforms and the degree to which ambitious goals have been met in reality.

Part of the change has involved shifts in ideology and decision-making processes. More conservative ideas about how societies should function have come to the fore, predicated on less active government intervention and more reflective of market forces, hence have terms such as choice, accountability, and efficiency become common parlance in the educational debate in some countries. But rarely have pure models been implemented in practice and the reality has proved to be more complex than the theories allowed. And with recent educational expansion have come active promotion, planning, and intervention. For areas such as youth training programmes, the establishment of new types of provision altogether has sometimes been necessitated. The common trend to the decentralisation of educational decision-making has often been accompanied by countervailing policy safeguards, whether they be in the form of national curriculum guidelines or assessment programmes or other centralising accountability mechanisms[4]. Growing awareness of the important role of enterprise training in overall provision in part confirms the importance of the market but has also brought into play new configurations of co-ordination and public/private mix. There is no unilinear trend, in other words, to deregulated decentralisation and less active policies in the educational field.

Quality

One of the clearest examples of the changing terms of debate has been the unprecedented prominence of the explicit aim of improving quality in education[5]. Of course, the pursuit of excellence and the concern for raising students' achievement levels are long-standing. It was in the 1980s, however, that "quality" became a watchword for policy strategy across many OECD countries in addition to being a defining educational aim for students, teachers, and institutions.

Some of the reasons for this prominence have already been touched on above. The desire to assess how effective had been the reforms and the additional educational expenditures of the 1960s and early 1970s led to ask about the quality of education provided. The changing sway of ideologies and the reaction in some countries to what was regarded as an excessive egalitarianism in earlier policies brought the charge that standards had been sacrificed. To focus on quality, from this view, provided the antidote. But the reasons for such interest in educational quality went further. The level of criticism grew in unprecedented fashion, as educational failings were blamed for an array of modern ills. Such criticisms have often been indiscriminate, even contradictory. They are frequently based on little direct experience, still less on empirical evidence. In any case, criticisms are always more easily articulated than general satisfaction. They are certainly more newsworthy. Yet, whatever the justification of different expressions of dissatisfaction in fact, the call to improve the quality of education expressed the general concern that all was not well.

Much of the criticism has been directed at schools, rather than the other settings of teaching and learning that are arguably no less deserving of scrutiny and improvement. In some countries, the institutions of higher education have been drawn under the spotlight insofar as pressures have been mounted to evaluate certain aspects of their performance[6]. The post-compulsory education and training sector for 16-19 year-olds has probably been subject to the greatest upheaval of institutions and programmes in most countries, yet not so much as a response to improving quality as such[7]. It is schools that are uniquely exposed. It is of these institutions that all citizens have direct experience of their own, and with them that they maintain closest contact if they are now on the other side of the schoolyard fence as parents.

The sense of malaise runs deeper, however, than the criticisms expressed by parents or employers. Deep-seated questioning about the performance of educational institutions stems

directly from the burgeoning growth of what they are now expected to do. Their brief ever expands. The student population has a wider coverage as larger proportions of infants, teenagers, and young and older adults come within education's responsibility. There is a concomitant spreading of talent, background, and clientèles among pupils and students. Challenging new economic, social, and cultural responsibilities are added to the learning tasks with which educational institutions have been traditionally charged. Little wonder that education systems can readily appear conservative and monolithic. To make matters worse, the standing of teachers has suffered long-term decline in most OECD countries. This combination – growing expectations of education alongside unprecedented criticisms and the declining recognition of the professionals charged with carrying out these responsibilities – suggests that the concern for raising quality is, in important measure, an expression of malaise and confusion about educational ends and means. A challenge for the 1990s is thus to engage in fundamental debate, positively inspired rather than defensively reactive, about the major goals to be set for education in all its different settings and the means by which these can actually be realised in practice. If the 1980s debate about quality in education has been to establish the case for change, that of the 1990s may well go much more profoundly into what that change should be and how it should be brought about.

The economic rationale

Economic factors, perhaps more than any others, have been telling in bringing about the renewed attention on education and training and for bringing the quality issue into the spotlight. Just as criticisms and dissatisfaction have proved a powerful inspiration of the general aim to improve educational quality, so has there been a defensive edge to the economic rationale for seeking educational reforms. Fears have been expressed in a number of countries that deficiencies and under-investment in education and training have a direct if long-term detrimental effect on economic competitiveness. The targets of worry tend to be twofold – immediate rivals among fellow industrialised countries and the rapidly industrialising economies, especially in South-East Asia. Concerning the latter, fears arise not only from shifting patterns of world trade but from international assessments of educational results, notably from the International Association for the Evaluation of Educational Achievement (IEA), showing comparable if not higher levels of attainment in mathematics and the sciences as in a number of the OECD countries. The growing interdependence of world economies sees greater recourse to international educational comparisons, whether solidly based or spurious.

Though defensively inspired, such worries express a fundamentally positive belief in the power of education, learning, and human resource development to contribute to a country's vitality and prosperity. It is much more difficult to identify exactly how the relationships actually operate. They will often involve the fostering of relatively intangible approaches and attitudes in students – the "culture of learning" rather than the specifics of syllabi. The relationships between learning and economic dynamism differ significantly depending on whether they refer to schooling or else to later vocational preparation, further, higher, and recurrent education and training. In short, the relationships and their policy implications are complex.

The reference to recurrent education and training signals the main point to be underlined at this stage. Affirmation of the importance of learning for economic outcomes should not, as the "first generation" of economics of education[8] in the 1960s tended to assume, mistakenly identify the key variable to be "years of schooling in initial education". This is doubly flawed: it assumes the quantity not the quality of learning to be pivotal; it is preoccupied with the initial

phase of education and training to the neglect of what comes later. Rejecting those assumptions raises questions about the ambitious percentage targets of provision currently being set for youngsters in post-compulsory and higher education in a number of OECD countries in response to today's acute competition between nations. On what basis have they been established? Can they always be raised and are they always the best response?

Some key facts and trends

Enrolments

One of the most obvious and ultimately important aspects of enrolments tends to be one of the least remarked – education and training systems today are enormous. In the most populous OECD country, the United States, statistics make this point most tellingly but they are simply illustrative: in excess of 6.5 million children in pre-primary education, over 41 million students in primary and secondary institutions, to which can be added nearly 12.4 million "third level", higher education students in 1987/88[9]. In addition, labour force surveys suggest that approximately a fifth of workers have received training in their current employment. In the light of these figures and comparable ones for other countries, it is little wonder that education systems are often characterised as cumbersome and bureaucratic. They have thus grown in size and complexity, despite the marked demographic shifts which have witnessed fertility rates dropping to less that 2.0 in 1989 in 21 of the 23 OECD countries for which recent data are available, and to 2.3 or less in the 2 remaining. In 1971, the situation was reversed: 14 of the OECD countries were standing above 2.2[10].

Whatever the demographic shifts, education systems will always be very sizeable, if only because the long duration of compulsory education ensures that large numbers of youngsters and teachers are brought within their compass. The shortest period of compulsory attendance among OECD countries is now 8 years (Italy, Portugal, some cantons of Switzerland, Turkey, and Yugoslavia)[11]. At the other extreme, it continues for 11 years in the Netherlands, the United Kingdom, and the United States, and for 12 if compulsory part-time education and training in Belgium and Germany are counted in. But the impressive size of systems, and education's domination of the early years of each person's lifetime, derives obviously too from the very high participation rates now commonplace in the levels where attendance is not strictly enforceable. This refers both to pre-primary institutions before primary schooling starts and afterwards in the diverse settings and programmes that make up the post-compulsory and post-secondary sectors. Compulsion is of declining significance in defining the educational careers of the young, whether before or after the ages when they are legally obliged to attend school.

At the pre-primary level, for children in the age band a year less than when primary schooling begins (which varies between 5 and 7 years in OECD countries), enrolment rates in percentage terms stood as high as 92.3 (Austria), 97.1 (Belgium) 69.2 (Canada), 96.8 (Denmark), 99.8 (France), 86.5 (Germany), 96.3 (Ireland), 98.7 (Netherlands), 100 (Spain), 86.7 (United States). Comparable figures are found even for 3 year-old children in Belgium and France (the latter can boast in excess of a third of 2 year-olds in pre-primary schools), countries which have a long tradition of extensive provision for these young age groups[12]. Even other countries with somewhat lower rates of enrolment for children of this tender age have witnessed significant increases in the proportions of the relevant age group catered for, in response to the parental demand for an earlier start to their children's education and for the provision of child care where the parents are working. Nor do the statistics cited take account of other child-care services some of which are quasi-educational[13]. Education now begins early.

The very sizeable proportions of young people staying on in education and training after the legal obligation to do so ceases can be captured using a variety of aggregate statistics (which, as always, hide wide differences in patterns of participation and provision). Published OECD data for school year 1986/87 show approximately three-quarters or more of 15-19 year-olds enrolled in some form of education in Belgium, Canada, Denmark, Finland, France, Germany, the Netherlands, Norway, Switzerland, and the United States[14]. In certain other countries for which there are data, the proportion is nearer to a half of the 15-19 age group in education – for example, New Zealand (49.3), the United Kingdom (54.3) – though this indicator of retention is sensitive to the differing ages when compulsory education attendance ceases and to what is counted as "education" rather than a variety of less formal training programmes. The proportion of the age group when "third level", further and higher education is normally begun who actually enrol gives another, albeit overlapping, indicator of the degree to which a prolonged educational career has become the normal experience for many young people. Approximately one third of young people so enrol in Germany, Greece, Ireland, Japan, the Netherlands, Spain, and the United Kingdom, while this proportion stands nearer to 50 per cent in Australia, Belgium, Denmark, Finland, France, and Sweden (see Table 2 of the Statistical Overview; 1986/87 figures for the United States are higher still at over 60 per cent).

One of the most powerful contributory factors underlying these high participation rates in post-compulsory education and training has been the growing numbers of women continuing their education to more advanced levels. There are serious gender inequalities throughout education which have still to be overcome but universal and rapid increases in the continued female participation beyond the minimum leaving age cannot be denied and themselves account, in no small measure, for much of the overall increases seen in recent years. In terms of participation in "third level" education, for instance, women were a half or more of students in Australia, Canada, Denmark, Finland, France, New Zealand, Norway, Spain, Sweden, and the United States (Statistical Overview, Chart 8). There are divergent examples: the female percentages were only 33.2 in Turkey and lower still at 30.1 in Switzerland (1986/87).

These figures tell a story of what might be regarded as a "quiet revolution". While the 1960s remain embedded in the consciousness of many as the period *par excellence* of expansion, the 1980s might come to be seen in hindsight as comparable, in terms of the establishment of the norm that the early part of a person's lifetime, from infancy to his twenties, should be spent in education and training. There are also signs in some countries that further and higher education systems are opening their doors to older students in growing numbers. Approximately half the OECD countries supply data on the age distribution of full- and part-time students and, of these, a number reported significant percentages aged 25 and over for 1987: Austria (41.6), Canada (33.8), Denmark (48.3), Finland (52.2), France (24.3), Germany (46.9), the Netherlands (33.6), New Zealand (39.5), Norway (44.9), Sweden (55.1), and the United Kingdom (33.5)[15]. But far from such figures implying the demise of the "front-loaded" organisation of education systems, as some of the proponents of recurrent education and lifelong learning predicted when these concepts were initially formulated, the statistics reported in this section show that learning opportunities are, more than ever, concentrated in the early part of the life span. It is this trend that might with value be scrutinised in the 1990s.

Teachers

As United States figures were given in the previous section to illustrate how large have become education systems today in terms of enrolments, so can numbers of teachers in that country be reported to similar effect. In 1986/87, the number of teachers in primary, secondary, and higher education institutions stood at over 3.3 million[16]. Whatever the country in question,

teachers make up a very sizeable section of the workforce. The size factor has specific consequences regarding teachers. The task of initiating and maintaining change throughout a workforce of this magnitude takes on a quite different dimension from when the focus is a small, relatively homogeneous occupation. It is not only a question of size but also a matter of the degree to which the workers as professionals share a common background, channels of communication, and occupational ethos. Despite the common title "teacher", there is a world of occupational difference between the pre-primary staff member and the pre-university or university don. Still more is that heterogeneity increased when the staff responsible for vocational preparation, enterprise training, and adult education are taken into account.

Specific examples of the constraints that the size factor imposes on change can be noted. There are the thorny issues of teacher status and rewards. In part, these are influenced by sheer numbers: as teaching forces have grown, so might one expect, all else being equal, an inverse effect on public recognition compared with smaller occupations that have continued to enjoy "elite" status. So do the numbers involved affect the room for significant change regarding financial rewards in the immediate term. Even relatively modest salary increases for all teachers can turn out to be extremely costly overall. This has led the authorities in some countries to consider targeted increases in the form of incentive payments. There are many issues raised by incentives; here it can be suggested that they are only likely to provide a supplement to, not a substitute for, general improvements in rewards, and their effectiveness depends crucially on them being set high enough and available to sufficiently large numbers of staff in order to alter the behaviour of all. The magnitude of the cost of increasing rewards for so many staff might instead suggest the need for a long-term approach so that annual increments stay within manageable bounds. United States figures can again be referred to – the 1990 average teacher salaries in 1990 dollars went up throughout the 1980s to attain $32 249 compared with $26 742 at the turn of the decade and surpassing the levels enjoyed in real terms in the early 1970s[17]. The size factor also gives a measure of the task facing strategies to improve the quality of education through such policy mechanisms as offering in-service education and training for teachers (INSET) on a universal basis. These examples do not imply that there are too many teachers; they do suggest though that the task of enacting significant change throughout the profession should not be underestimated.

Another common label to describe teaching forces today is "ageing", the consequence of the very sharp increases of teacher intake that occurred in the 1950s, 1960s, and into the 1970s in some countries, followed by the years of lean recruitment. An OECD analysis of the phenomenon[18] suggested that the teaching profession is "ageing but not aged" and cited examples – Dutch primary school teachers with an average age of less than 35, half the Danish primary and secondary teaching staff below this age, over 70 per cent of Greek secondary teachers under 40 (the figures refer to the latter years of the 1980s) – to warn against exaggerating the ageing phenomenon. And direct comparisons with the average ages of teachers 15 to 20 years ago can give a misleading picture since, with the massive recruitment of young staff at that time, these were then at an historical all-time low. But that same analysis provided few grounds for comfort concerning the seriousness of the ageing phenomenon.

The grounds for concern are at least threefold. First, while ageing does not present an immediate crisis of recruitment for most OECD countries, it cannot be met by short-term measures when the time comes. In other words, while the consequences will become apparent over the medium and long term, the need for immediate action is pressing to avoid sudden emergencies. Second, because of the very large annual intakes of new entrants to the profession during the peak years of recruitment in the late 1950s and 1960s, the indicators of ageing are themselves changing rapidly. The description "ageing but not aged" in the late 1980s looks set

to be out-dated by the mid-1990s. Table 4 in the Statistical Overview of this volume shows that certain countries the Scandinavian ones stand out – already have teacher age distributions highly skewed towards the upper range. Most education systems are confronting growing numbers of retirees and simply replacing these presents major difficulties for the years ahead. But to make matters worse, the general situation is not static – professional labour markets in general are moving into a period of shortage and stiff competition in many countries. The third area of concern is thus that just as the pressure to recruit larger numbers of talented new entrants grows, so is the competition from other professional sectors.

As teachers can be characterised as a very large professional group and an ageing one, so is the profession commonly described as "feminised". Scrutiny of the statistics shows this to be only partially accurate. While the proportions of female staff typically stand in excess of 90 per cent at the pre-primary level, and women are commonly two-thirds or three-quarters among primary staff, even in the latter case there are exceptions. They comprise less than half of primary school teachers, for instance in Greece and Turkey. The female proportions are lower at the secondary than the primary level. For the countries for which the OECD has data, women commonly make up about half the staff in upper secondary general education, though it is nearer a third in Germany and Norway, a quarter or less in Japan and the Netherlands, and the proportion is low in Luxembourg. These latter proportions are the typical levels for female staff in vocational and technical education (Table 3 of the Statistical Overview). The low representation of women among the faculties of higher education is well known.

Care is thus required with blanket generalisations about teaching as a "feminised" profession. Nevertheless, it is clear that very large numbers of women teach and they represent a very important source of recruitment, indeed a potentially vital one in the face of emerging teacher shortages. There are other defining features of the employment and deployment of female staff, including their marked under-representation in promoted posts, that will need to be considered in strategic efforts to target women in the face of problems of teacher shortages. These features will be considered further in Chapter 7.

Expenditures

One of the most common indicators of the magnitude of the financial resources devoted to education is to express these expenditures as a percentage of GDP. For international comparisons, it is not a straightforward statistic: a given percentage for a rich country means more abundant funding than in a poor one; one with relatively few young people can unfairly appear parsimonious compared with a country with bulging school rolls; structures of funding, and the role of private sources, including households, vary widely, with much escaping the statistician's accounts. With these caveats to the fore, actual recorded percentages span a wide range. Public expenditure on education in 1989 as a proportion of GDP (for which most countries supply data) is barely 4 per cent or less in some cases (2.7 in Greece, 1.8 in Turkey, 3.8 in Yugoslavia) up to high levels of over 7 per cent in the Scandinavian countries of Denmark, Norway, and Sweden (Statistical Overview, Table 5). To include private sources makes a significant difference to the orders of magnitude for some countries – Canada's percentage jumps to 6.8, Finland from 5.3 to 5.8, France from 5.3 to 6.3, Japan from 4.7 to 6.1, the United States from 4.8 to 6.4. In certain others, the additional sums are relatively minor.

Public expenditure on public education expressed per student as a percentage of per capita GDP helps show how much more the upper expensive parts of education systems receive from the public purse than the provision for young children. Again, the figures vary widely across countries but they show, for 1986/87, percentages between 10 and 20 for pre-primary educa-

tion, and between 5 (Turkey) and 10 (Greece) for the primary level at one end of the spectrum up to 28 per cent for primary schools in Denmark and 29 for Sweden[19]. For "third level" further and higher education, in contrast, the percentages are significantly higher with a sizeable number of countries where this percentage was 50 or more in 1986 or the nearest year available [Australia (55), Austria (50), Ireland (73), Japan (118), the Netherlands (82), New Zealand (56), Portugal (60), Switzerland (52), Turkey (61), and the United Kingdom (85)]. In other countries, the per-student public higher education expenditure figure as a proportion of *per capita* GDP is not so high, reflecting, among other things, the size of the higher education system and the structure of funding. Some countries do not even conform closely to the general pattern of spending markedly more per head for the expensive higher education sector. The most even distributions are found in the Scandinavian countries and in France. The latter country has the lowest percentage for higher education on the same indicator (30) among those that supplied data which is only marginally greater than that enjoyed by secondary schools (26) and less than double that for the primary level (16).

Data for expenditure on education and training outside the formal system are considerably more sketchy than the already unsatisfactory statistics on spending available for schools and colleges. What is available tends to reinforce the patterns already identified in this chapter – marked differences between countries in spending levels and patterns, substantial additional sums spent and learning resources over and above those covered by conventional definitions of "educational expenditure", but which must be judged against the size of the potential clientele represented by the total adult population.

Illustrative figures suggest sizeable investments by enterprises in human resources in OECD countries. One U.S. estimate from the early 1980s put corporate spending on employee training at between $30 and $50 billion annually, rivalling outlays on higher education and representing an approximate tenfold increase in current prices from the beginning of the 1960s[20]. More recent data suggest that expenditures by companies for off-the-job training as a percentage of total payrolls stand at between 1 and 3 per cent for some OECD countries that possess such information, though much of this expenditure is accounted for by the salaries of the trainees, and within these averages there are marked variations by the size of enterprises and by industry[21]. Public expenditure on special youth and adult training programmes as a proportion of GDP varies from the tiny 0.01 per cent of Switzerland through to 1 per cent or nearly in the cases of Denmark and Ireland (Statistical Overview, Table 8). In this field, account needs to be taken not only of the structure of provision and of GDP, but also of need. Spending on labour market training programmes augment, other things being equal, when, for instance, unemployment levels stand high. Yet active training policies include a much broader range of purposes than supplying immediate assistance to the unemployed; arguably they are a permanent feature of OECD economies undergoing rapid structural change.

Of the many detailed issues raised by the patterns and trends of educational expenditure, two can be singled out as of particular relevance to the subjects dealt with in the chapters that follow – investment in education in the form of capital expenditure and the magnitude of the emoluments (largely salaries) item in the current spending bill. Public capital spending is higher where substantial efforts at building up the capital infrastructure continues: it is more than 10 per cent in Japan, Luxembourg, Spain, Switzerland, and Turkey, and is tending now to rise again in many countries, though from very low base lines. It is still 5 per cent or less in Belgium, Denmark, the Netherlands, Sweden, the United Kingdom and Yugoslavia (Statistical Overview, Table 5). Questions now arise concerning the need for renewed educational investments in the light of the quality of the building stock that dates from those expansionary years and of the array of new purposes, programmes, and student clienteles that have been added to

education's charge. This need arises most obviously in those countries which have set ambitious target goals to increase participation over the 1990s, such as the official French aim approximately to double the proportion of students attaining the valued *baccalauréat* qualification by the year 2000. Whether such new investments should be met entirely by the public purse, how the burden should be shared with other public policy agencies, and how efficiently are the returns made on these investments are obvious questions on the political agendas of the years ahead when such large sums of money are involved.

OECD data show the item "emoluments" to take the lion's share of public educational spending. It accounts for 90 per cent of the overall bill in Belgium, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, Switzerland, and Turkey[22]. For some, the emoluments of teachers take up most of this (for example, in Greece, Ireland and Turkey). But not in all countries do teachers' salaries figure so prominently. Maintaining other non-teaching staff and administrators can also incur significant costs and this shows up most in the statistics in Austria, Canada, Finland, New Zealand, and the United Kingdom. The sheer size of the salary bill, however, certainly renders any aim of keeping expenditures within limited scope a daunting one as pressures mount to make teaching a more attractive profession in the face of emerging shortages. And that factor provides additional grounds for reflection on the long-term strategy of extending substantially initial systems of education and training. It may prove to be a very expensive option.

Concluding remarks

In the first section of the chapter, we noted that the renewed optimism and belief in the importance of education and training has not heralded a return to the 1960s – issues and problems are now framed in different ways, new priorities and concerns have emerged in the interim. Knowledge about educational problems and solutions has increased enormously over the past two decades. A predominant focus on public systems of initial education has been modified in recognition of the variety of other sources of knowledge and learning and through broadening interest beyond children and young people to adult learners in their different roles and capacities. Education should be "for all", not only the young.

Much of this change has been positive and is, in any case, irreversible. But the argument can be made for making the 1990s a decade that parallels the 1960s in terms of optimism and vision, this time backed by a considerably greater understanding of education and its relation to the wider social, economic, and cultural environment. This chapter has referred to the sheer size to which education systems have grown in terms of enrolments and teacher numbers. But the data also suggest that resources could pose a major problem in the coming years. The "quiet revolution" of expansion seen over the 1980s has gone so far as to invite the reappraisal of the main directions of education policies and of the resources, human and financial, needed to sustain them. Widespread concern for qualitative improvement invites the more sustained consideration not only of how educational provision can be "better" but also the actual qualities that the educated person entering the 21st century should be equipped with. The parallel with the 1960s can be more tightly drawn still because identifying the ends and means for offering high quality and training for all is to emphasize the equity concerns so prominent in the debate of that earlier watershed decade. But instead of "quality" and "equality" being sharply contrasted as commonly occurred then, the aim should now be to bring these two broad aims into full harmony.

NOTES AND REFERENCES

1. The major events in the early years of OECD's activities in the educational field reflected the expansionary optimism. See in particular OECD (1962), *Policy Conference on Economic Growth and Investment in Education* (report on the Conference held in Washington D.C., 16-20 October 1961), and the *Conference on Policies for Educational Growth*, held in OECD headquarters, Paris, 3-5 June 1970 [general report published as OECD (1971), *Educational Policies for the 1970s*, Paris, and 12 supporting studies].

2. The main statement outlining the concept promoted by the OECD, recurrent education, remains OECD/CERI (1973), *Recurrent Education: A Strategy for Lifelong Learning*, Paris. See also E. Faure *et al.* (1972), *Learning to Be*, UNESCO, Paris; and Council of Europe (1970), *Permanent Education*, Strasbourg. For a discussion of the concepts and subsequent developments, see H.G. Schütze and D.H. Istance (eds.) (1987), *Recurrent Education Revisited: Modes of Participation and Financing*, CERI, Almqvist and Wiksell International, Stockholm, Chapter 1.

3. So much did scepticism about the independent value of education set in, in the light of sociological studies appearing to demonstrate that educational variables made little or no dent on inequalities of social background, that a common question became "do schools make a difference?" The more recent reform movements of the 1980s, and research such as that exemplified by the "effective schools" literature, have been founded on reassertion of the common sense observation that they do.

4. Discussed, for example, in OECD/CERI (forthcoming), "Decentralization and School Improvement: New Perspectives and Conditions for Change" (Document on general distribution).

5. See OECD (1989), *Schools and Quality: An International Report*, Paris.

6. As discussed in, for example, M. Kogan (ed.) (1989), *Evaluating Higher Education*, OECD/IMHE Higher Education Policy Series No. 6, Jessica Kingsley, London.

7. OECD (1989), *Pathways for Learning: Education and Training from 16 to 19*, Paris.

8. The term used by M. Blaug (1982), "Where Are We Now in the Economics of Education?" (OECD working document).

9. OECD (1990), *Education in OECD Countries: A Compendium of Statistical Information, 1990 Special Edition*, Paris, Tables 1.1 to 1.3, 3.3.

10. OECD (1991), *OECD in Figures: Statistics on the Member Countries, 1991 Edition*, Paris, pp. 8-9.

11. OECD (1989), *Education in OECD Countries 1986-87: A Compendium of Statistical Information*, Paris, Annex p. 106.

12. OECD (1990), *Education in OECD Countries, 1990 Special Edition, op. cit.*, Table 4.1.

13. Data showing the relative share of child-care and pre-school provision in some Member countries are contained in OECD (1990), "Child Care in OECD Countries", *Employment Outlook*, Paris, Chapter 5.

14. OECD (1989), *Education in OECD Countries, 1986-87, op. cit.*, Table for Chart VB, p. 37.

15. OECD education data bank. These figures are well up on those reported in the 1987 publication OECD/CERI, *Adults in Higher Education*, Paris, Tables II.2 and II.3.

16. U.S. Department of Education (1988) *Digest of Education Statistics, 1988*, National Center for Education Statistics, Washington D.C., Table 4.

17. U.S. Department of Education (1991), *The Condition of Education*, Vol. I, Washington D.C., p. 94. For a fuller discussion of salaries and the other factors affecting teacher supply and demand see "Teacher Demand and Supply: The Labour Market for Teachers" (forthcoming 1993).

18. OECD (1990), *The Teacher Today: Tasks, Conditions, Policies*, Paris, Chapter 2.

19. OECD (1989), *Education in OECD Countries, 1986-87, op. cit.*, Table for Chart IX.

20. OECD (1988), *New Technologies in the 1990s: A Socio-economic Strategy*, Paris, p. 95.

21. OECD (1991), *Employment Outlook*, Paris, and data supplied to the OECD activity on the further education and training of the adult labour force.

22. OECD (1990), *Education in OECD Countries: 1990 Special Edition, op. cit.*, Table 6.3.

Chapter 6

RAISING EDUCATIONAL QUALITY: TOWARDS A CULTURE OF LEARNING

The changing terms of educational debate, as the previous chapter described, has seen the unprecedented rise of concern for raising quality, not only in the sense of excellence of individual scholarship or craftsmanship but as an over-arching ambition uniting the diverse arms of educational policies. A mainspring of this change has been a sense of dissatisfaction – the feeling, however expressed, that education should, put simply, be "better". It risks being a reactive rather than constructive perception. The common charge that "standards have fallen" can imply that the lessons for improvement are to be found in past aims and practice. Such interpretations of quality offer only limited guidelines for future improvement. To regard the scope and ingredients of good quality education as already known, in terms of an unspecified set of the traditional educational tasks, neglects the very change – economic, social, cultural, and educational – that has been documented in the previous two chapters.

To move beyond such limitations means to complement the concern for excellence and improvement with the clearer identification of the qualities that are relevant to young people and adults as the 21st century approaches and of realistic means of providing them through education and training, in tandem with other learning agencies. The very process of identification is itself a vital step in the pursuit of quality. It is not a matter that can be laid down in the form of a blueprint. Just as the relatively intangible notion *ethos* is a key ingredient of effective schools, so can successful education systems be similarly identified in terms of "ethos", characterised by the active pursuit for improvement, the search for consensus about ends and means, and positive support for learning in all the different settings in which it occurs[1].

Selected dimensions of quality

The focus of policy attention

One dimension of approaches towards and concepts of educational quality is that of focus or level. However obvious it is to state, strategies differ depending on the level – micro through macro – at which they are directed. The focus for improving education can be on the local level through larger units of decision-making to the system as a whole. Certain of the policy strategies for qualitative improvement will be targeted on individual schools, or even classes, students, and teachers. Others will be concerned with the aggregate effects for the student population and organisational changes of the system as a whole. The goals by which qualitative change is assessed as having improved or declined will thus not necessarily be the same

depending on the level in question. An education system, for instance, marked by sharp inequalities of educational opportunities and results might well be judged unsatisfactory overall, despite containing pockets of excellence.

In recent years, the realisation has grown in many countries that individual institutions and teaching staff need a sufficiently wide margin of autonomy to establish an ethos of professionalism and active learning[2]. Considerable care is thus needed to ensure that the gains brought by decentralisation and enhanced professionalism are not lost if countervailing centralising policies spread bureaucracy and undermine the very autonomy being fostered. Decentralisation should not, however, mean the demise of educational policy-making at the national and regional levels in favour of local decision-making. Overall aims, shared support services, the assurance of equalisation of opportunities across institutions and districts, and the very ethos of systems depend critically on general policies.

The cognitive and non-cognitive

Some perceive the learning that is the special province of organised education to be the cognitive. To many others, however, education embraces a broader understanding to include affective, social, aesthetic, and moral learning. Even restricting education's purview primarily to the former – cognitive knowledge and skills – is hardly to define a narrow field. The explosion of knowledge means that, even in cognitive terms, curricula can only ever be a small selection of the potentially relevant. Care must be taken to avoid the assumption that achievement in any one cognitive domain can stand as a proxy for mastery on all others; debates about "standards" are replete with examples where average results on a single indicator of cognitive achievement, say in algebra or reading, are mistaken as summary statistics of overall performance. Again, loose reference to "standards", as if these are already known on the basis of past practice, does not assist in the identification of *which* knowledge and skills are to be fostered.

The perspective is widened by the additional consideration of the non-cognitive aims of education in terms of the moral, affective, aesthetic, and social attributes referred to already. Diverse, often contradictory claims about curricular policies are commonplace in this regard. Some diagnose an outstanding failing of educators today to lie in the dilution of their tasks through the inclusion of a variety of responsibilities beyond the learning of cognitive knowledge and skills. Yet many of the same commentators who so decry a decline in standards and clamour for a return to basics are equally incensed about supposedly deteriorating moral values and insufficient regard for traditional social attributes such as neatness, punctuality, and politeness. When the problems of anti-social behaviour or drug abuse come to the surface, teachers are usually among the first to be chastised for failing to instil an adequate sense of right and wrong or to educate for more healthy life styles. A common plea from employers is for the education system to develop in youngsters the skills of co-operative endeavour, and attitudes of industriousness and curiosity, which go well beyond the specifics of syllabi. These specifics, in any case, will often be of only very limited application in the rapidly changing workplace of today.

The consequences of attempting to meet all the different competing demands and claims should be addressed. The risk is incoherence when the call is both for concentration on the cognitive and for much greater attention to be given to the social and moral spheres. If employers assert that education systems fail in their duty to develop creative, curious, co-operative young adults, then there must be acceptance of the conditions under which these attributes are most likely to be realised. It means that the very culture and ethos of educational institutions, and systems in their entirety, make the learning of these attributes paramount. That

is patently a more demanding and open-ended challenge than assuring that maximum numbers succeed in examinations or pass on to the next level of the education system.

Employers themselves hold a major key to allowing such positive change to occur, through the way they use educational certificates as screening devices for job entry or promotion. So long as certificates are widely used in this fashion, then powerful bureaucratic pressures constrain the spirit of innovation, even risk-taking, in institutions, which is needed if these more general goals that are fundamental to a good education are to be promoted. Far from suggesting a smaller role for the employment world in educational affairs, the decrease in bureaucratic certification depends on employers becoming more closely involved still. There should be a well-developed system of information exchange so that they are fully briefed on what different curricula, programmes, and qualifications cover, thereby permitting them to resort less to certificates as mere screening devices[3]. They need to be fully involved in the design and updating of qualifications, and be able to articulate what they feel that educational institutions can reasonably achieve to help develop the attributes they value. They should be strongly supportive of the educational world, so that the present artificial divides can be breached. And since now many of the knowledge and skills used in modern workplaces can only be fostered in the course of careers, especially in the light of rapid structural and technological change, employers must be ready to share the cost of developing human capital; it is false economy to leave the lion's share to initial education and training systems. Both the educational and employment worlds would benefit from an open dialogue to establish what each one can do best.

Knowledge and skills

Further clarification is provided by attention to the distinction between knowledge and skills. For some observers, the former is paramount and curricula are defined in terms of areas of knowledge and facts to be learnt. In contrast, there is the viewpoint that a preoccupation with facts is to stifle curiosity and the willingness to learn anew, encouraging limited, "correct-answer" approaches to knowledge. An extreme view on either side is unlikely to be helpful. Narrow forms of learning through rote and memory can hardly be applauded as providing the advanced understanding needed for today's world. The textbook view of knowledge, sharply separating one topic or subject from another and labelling the "relevant" that which will be tested, denoting the rest as "irrelevant", is the antithesis of genuine knowledge and understanding. There is always the danger that forms of student assessment, introduced with the aims of rigour and accountability to the fore, end up with education characterised by "teaching to the test". At the very least, that is poor preparation for what is later needed in the modern enterprise, typified by the use of multiple skills, team-work, and problem-solving.

But to reject the value of knowledge *per se* is equally distorted. Supposed historical understanding without empirical facts, or mathematical skills devoid of an appreciation of magnitudes or relations, is no more satisfactory. Knowing how to learn a foreign language is an empty skill unless a student is actually able to converse and understand abroad. The rigid separation of knowledge and skills is itself misleading. It is precisely through knowledge that skills are exercised. Contrariwise, the purpose of acquiring learning skills is to advance knowledge. The aim should be to develop both in a mutually reinforcing way.

The search for a new synthesis of knowledge and skills, for the articulation of employers' demands with those of others in the community, parents, and students, and the clarification of the special missions of education together raise the central issue of the *core curriculum*. Skilbeck concluded his OECD/CERI review of trends in curriculum reform by arguing that the

core issue is about much more than defining subject matter that all youngsters should be introduced to, important though this is:

> "The debates about quality, economic restructuring and its educational consequences, multiple and flexible skills, values and contemporary issues of global importance will continue. They will impinge in numerous and varied ways on particular subjects or subject areas and different stages of schooling. But if they are to have more than a marginal or piecemeal effect, it is to the whole curriculum, the foundation core studies and the sequential designs for learning that energies should be directed. It is in this sense that the core curriculum is indeed the central issue. The debates which are occurring and will recur need to be informed by a breadth of understanding of the central mission and purpose of the school in contemporary society (p. 80)."[4]

The articulation of all the different interests and demands, and reflection on central missions, as mentioned by Skilbeck, suggest close attention to the traditional distinction between the general and the vocational that has exercised such a powerful influence on the organisation of education and training to date.

General and vocational

Across all OECD countries, each with its own rich diversity of programmes for education and training, the common distinction between the general and the vocational is applied to widely differing situations. In some countries, especially in Europe, there continues to be a strong tradition of vocational education in secondary schools. Some others prefer to delay vocational specialisation to at least the upper secondary, if not post-secondary, stage. The coverage of terms varies. In the United States, the "academic" stream, intended for college preparation, is distinct from the "general" stream in high school programmes, which has more of a remedial character. In fact, many so-called pre-vocational programmes for youngsters perceived to need additional preparation before embarking on vocational study, might more accurately be labelled "general", because of their remedial character. Not only are there wide differences of organisation and nomenclature across countries but the scope and content of programmes have themselves been evolving within countries. With more and more youngsters staying on beyond the minimum leaving age, for example, technical and vocational streams have diversified to accommodate the new clienteles. Previously distinct vocational streams have become much more heterogeneous and difficult to characterise in terms of stage, sector, or level. Some courses continue to be very occupation-specific; others are more broadly based[5].

Though contents and the students being served remain diverse, a certain convergence of purpose has been observed between the so-called vocational/technical and general courses. On the one hand, complex, rapidly changing production processes call for greater theoretical content to support the practical character of training. On the other hand, knowledge about the employment and labour market fields is increasingly seen as an essential part of preparation for life, no matter what the course of study, including the so-called "general" ones, though many such programmes prove reluctant to alter significantly their approach. And within higher education, the employment value of programmes has intervened to rearrange traditional hierarchies of desirable courses of study. In recent years, shorter cycle higher education institutions have proved relatively successful precisely through their responsiveness to market forces[6]. A common reluctance to view higher education programmes as "vocational" at all is thus increasingly untenable.

All this suggests that the distinction between the general and vocational may have become unhelpful and even misleading. There will always, of course, be differing emphasis between

courses with a particular labour market orientation and those with a greater academic flavour. But the traditional distinction can wrongly imply that schools, colleges, or universities providing so-called "general" programmes are concerned exclusively with individual development and the learning of knowledge for its own sake without any labour market orientation. This, as argued above, is far from accurate. To interpret the "vocational" as learning that is unconcerned either with abstract reasoning or theoretical content, or the development of other social habits and skills, is no more valid.

Whatever the language and terminology adopted, the questions to be addressed are fundamental to current policy concerns. What is the proper place of professional preparation and contact with the employment world across all programmes? How to realise a meaningful curriculum for *all* students, including those who find what is on offer in schools arid and irrelevant to their needs? How to ensure that employment concerns are reconciled in a balanced way with the full development of individuals as citizens, voters, family and community members, and human beings? How to accommodate increasing heterogeneity among the student population and the courses on offer with the convergence of purpose between the theoretical and the occupationally-oriented? No simple or single answers exist to these questions, but, to reiterate Skilbeck's conclusion, debates will need to be informed by "breadth of understanding". Ill-considered associations, such as the assumption that subjects like languages, humanities, and the social sciences hold little relevance for the labour market, or that training in certain traditional industrial fields is soundly practical even when numbers trained far outbalance available outlets, should be open to scrutiny. And all levels and settings of education should be included in a policy framework that takes the concept of lifelong learning as the organising ambition.

Schools and other settings

As already noted, the main focus for qualitative improvement in many countries has been on schools, especially at the secondary level. It is at this stage that problems stored up from earlier years so often become manifest. Later educational outcomes correlate closely with school success. The subject-oriented secondary curriculum, with the assessment and certification functions prominent, frequently gives rise to disenchantment among students, exacerbated by the onset of puberty and adolescence. Choices multiply and the proximity with labour market entry introduces special pressures and demands for students and teachers alike. Intense questioning occurs, therefore, about the quality of what is on offer and the results achieved by the students. In some countries and quarters, however, the focus on quality has already widened. Tracing learning difficulties back to earlier years has led to greater scrutiny of the relatively closed worlds of the primary, even pre-primary, school. The rapid expansion of training programmes for teenagers and young adults gives rise to questions about their variable quality. There are doubts expressed, in the United States in particular, that too much of higher education provision offers a *smorgasbord* of options with little coherence and interconnection between them.

Adoption of broader perspectives is long overdue. Schools have borne an excessive brunt of criticisms to date. The rapid expansion of education and training programmes for teenagers and young adults, much of it a response to the emergency of very high levels of unemployment among young people, might be paralleled to the earlier era of the 1960s as one where quantitative growth frequently took precedence over the assurance of its evenly high quality. Expanding and widening access to higher education has too often been achieved at a price that would not be tolerated in schools – very low or non-existent contact between teachers and

students, the prevalence of the didactic lecture to large audiences, poor library and study facilities, no requirements for staff to train for teaching itself, and pedagogical innovation left to the lonely efforts of enthusiasts. Such a description may not be typical and countries vary widely in this regard. But the relative autonomy of the higher education sector may well have been one factor keeping such negative features, where they do occur, in relative obscurity. As many countries seek to broaden participation in higher education and training – to move towards "the learning societies" needed to confront the challenges of the 21st century – the quality of such provision becomes a matter that cannot be ignored.

Broadening the focus so that the pursuit of high quality in provision and programmes is seen as a priority at all levels, does not in any way diminish continued efforts to improve schools themselves. Enquiries and research in the tradition of "effective schooling" have identified a number of the characteristics that appear to be most associated with good schooling. There is no single formula and those characteristics will vary according to the distinctive features of each education system. "Strong leadership by the principal", for example, is likely to be a much more powerful explanatory variable in systems where much is left to the individual head of the school compared with other countries which rely on more collective forms of leadership.

The OECD report on *Schools and Quality* identified ten characteristics that appear to play a particularly powerful role in determining outcomes:

> " *i)* a commitment to clearly and commonly identified norms and goals;
> *ii)* collaborative planning, shared decision-making, and collegial work in a frame of experimentation and evaluation;
> *iii)* positive leadership in initiating and maintaining improvement;
> *iv)* staff stability;
> *v)* a strategy for continuing staff development related to each school's pedagogical and organisational needs;
> *vi)* working to a carefully planned and co-ordinated curriculum that ensures sufficient place for each student to acquire essential knowledge and skills;
> *vii)* a high level of parental involvement and support;
> *viii)* the pursuit and recognition of school-wide values rather than individual ones;
> *ix)* maximum use of learning time;
> *x)* the active and substantial support of the responsible education authority.
>
> Few would restrict the definition of school quality purely to the academic criteria on which 'effectiveness' in the literature commonly depends; the lessons of that literature nevertheless provide valuable pointers to the general pursuit of school improvement (p. 141)."[7]

As the research has progressed so have the questions evolved in ways that extend the focus both inward, towards the teaching/learning process in classrooms itself; and outward, seeking to understand school effectiveness in the community, region, and national contexts while broadening the interpretation of "effectiveness" beyond criteria of measured student cognitive achievement. For policy, the important lessons derive perhaps less from hitting upon a particular list of the defining features of effective schooling. Instead, the main significance of this work is arguably to show that questions concerning the organisation and management of the learning that takes place within schools and other educational institutions are critical to the success of policies designed to improve quality. This in turn opens up the search for the optimal role of policies – at the local, regional, and national levels – to promote the conscious search for the best organisation and management of learning at the "micro" interface. This is, ultimately, the heart of the matter.

Information about quality: statistics, research, evaluation

Statistics and indicators

Progress has been made in many OECD countries in gathering and rapidly publishing educational statistics, due largely to the improvements in information technologies. With the increasing interest in education and training in general, and in accountability in particular, so has the public thirst for information also grown. It is not clear whether the progress achieved in data-gathering has kept pace to slake this thirst. Certainly, much of the information sought after to fuel educational debate and for the purposes of accountability is beyond the scope of national educational statistics; these can describe the main features of systems but normally shed only indirect light on complex empirical relations or local performance.

Yet as the demand for information has grown, then so have many of the gaps been exposed even in national descriptive data. Such data tend to be especially weak in those areas that lie at the margins of or outside the administrative needs of the mainstream system. Examples include data on early childhood provision, private education (whether publicly subsidised but still more if entirely private), education and training programmes partly or entirely beyond the normal province of the established education authorities, and adult education[8]. Such areas, for the reasons discussed here, are key parts of the overall learning provision of OECD countries. But the information base concerning even the basic numbers of students, staff, institutions, and resources in each are often unavailable. Although the enterprise of data-gathering and the details of statistical conventions tend to be perceived as prosaic matters, the absence of basic data represents an important diminution of public accountability.

Particular efforts should thus be extended to broaden the coverage of national education and training statistics. Co-operation and co-ordination should be sought wherever possible with the other relevant agencies concerned with organised learning to bring their programmes as fully as possible into the statistical picture. Current practices of data-gathering and conventions used should be scrutinised to ensure that administrative convenience is not their sole rationale.

The problems are magnified significantly when comparisons are sought across countries. The afore-mentioned gaps, differences of coverage and definition, and national particularities make comparability an especially acute problem for international statistics of education and training. Despite these difficulties, just as the demand for information has grown at the national level, so is there widespread interest in comparing one country's situation with that of others. However strong that demand, the comparisons drawn will be meaningless unless they possess a reasonable degree of validity[9]. The recent OECD study of teachers, for example, has demonstrated how difficult it is to compile an accurate description even of teacher numbers, allowing for factors such as part-time working and contractual status, across the different educational levels[10]. The present state of the data preclude valid comparisons of the more complex relations, such as pupil/teacher ratios, that are of particular public interest. If meaningful international comparisons are to be drawn in such areas, attention must be directed at the effort and priority they currently receive in national administrations and international organisations, and consideration given to new data-gathering exercises and classification systems where appropriate.

A further reflection of the demand for information at the national and international levels has been the widespread interest recently accorded to education *indicators*. A CERI activity has been launched to develop and co-ordinate indicators across interested OECD countries[11]. Viewpoints differ on precisely the ways in which indicators differ, if at all, from statistics: some argue that what distinguishes the indicator is that it deploys the simpler descriptive

statistics within a system of known relationships between variables, where variation represents agreed improvement or deterioration. The medical metaphor is frequently invoked: indicators can be likened to the thermometor or cardiogram providing "readings of educational health". Whether or not indicators can fulfil the promise of purveying direct measures of educational "health", their validity, nationally and internationally, is obviously even more dependent on ensuring comprehensiveness and comparability than described above for statistics.

The conditions for their successful development are especially demanding, however, if this depends on the charting of the magnitudes of relationships between series of variables organised into systems, following the definitions contained in the previous paragraph. Strictly speaking, for these to be valid cross-nationally, these magnitudes and relationships must be known and uniform across all the countries in question. At the very least, this calls for highly sophisticated information systems. And no matter how elaborate such systems might be, an outstanding difficulty remains that the very object of educational reform is to *change* established relationships, thus destroying existing measured correlations. For instance, if educational reform were suddenly successful in a country in bringing 15 year-olds to average levels of attainment previously only managed by 17 year-olds, then conventional interpretations of participation, retention, and drop-out fall to the ground. The point to be underlined here is that, whatever the eventual success of indicator development in meeting exacting ambitions, the value of the exercise lies in seeking to combine an understanding of educational relationships and process with measurement of results to make for more informed debate and policy-making.

Research

The starting point for such an understanding is through research. Of all that might be said about educational research, what is perhaps the most striking is how little of it there is. Compared with any other branch or sector of activity of comparable size, the amount of R&D is extremely low in the educational field. When European Ministers of Education met in Helsinki in 1987 to discuss new challenges confronting teachers and their education, this fact was presented to them in an expert's report in the starkest terms:

> "The amount given to research in education compared to the cost of education as a whole is minimal. If this fact is related to the demands on education the situation must be characterized as absurd. Even though comparisons of this sort are problematic, a comparison with companies or with medical welfare underlines this absurdity. A company which were to plough back as few of its resources into research and development as education does, would not survive for long."[12]

Yet despite this under-investment, knowledge about education has actually advanced very substantially over the past couple of decades. That research endeavour has helped to establish a clearer picture of relationships, processes, and effective practice. But it has also uncovered just how complex and variable is the learning process and its organisation; it has thrown into focus the extent of our ignorance.

The call for more substantial investment in educational R&D does not, however, mean that it should fit predominantly into the traditional academic research paradigm. That type of research does, of course, have an important role to play. But much research might most usefully occur locally, involving subject departments in institutions, schools and colleges, groups of institutions and authorities. Following this approach, teachers will be involved as "reflective practitioners", pursuing "action research" in co-operation with other experts and players in the educational process. The emphasis will be on the identification of progress, the diagnosis of problems, and the transfer of results to others confronting similar educational situations. The

networking opened up through information and communication technologies may be one feature of this research and development endeavour. Research in this sense is actually a form of educational evaluation, undertaken as a constant activity of diagnosis, comparison, and analysis. To move in this direction assumes, however, that schools and colleges are "learning enterprises", possessing a powerful ethos of collective analysis in settings that set aside the time and energy for it to occur. That is not necessarily a description that many of today's teachers would recognise of their workplace.

Evaluation and assessment

Matters relating to evaluation and assessment have threaded their way through many of the subjects dealt with here so far – the changing terms of debate and the concern for quality; qualifications, certification, and the role of employers; the importance of information and analysis for accountability purposes and for improved educational practice. In the previous section, the argument was made that the analytical and diagnostic functions are an integral characteristic of quality in teaching and learning. As regards the "quality control" represented by student assessment, there is the widespread argument that a precondition of "doing better" is to know how well matters stand at present. But while monitoring students' attainment and achievement levels may provide invaluable information, it does not by itself improve their education. That depends, at root, on the actual teaching and learning taking place in classrooms, workshops, and lecture halls. And assessment procedures can in some circumstances produce the negative side-effects mentioned previously of "teaching to the test" or of stifling innovation, in which case the trade-offs between these costs and the expected benefits must be carefully weighed.

Policies and practice in this field differ along a number of dimensions. One is the cultural factor of general attitudes regarding assessment and measurement in each country. In some, exemplified in the Scandinavian region, there is widespread suspicion of tests and marks, especially for students in the compulsory years of education. Local collaboration and decision-making tend to take preference over national monitoring or inspections. There is acute awareness of the risks associated with the labelling and classification of pupils and students. In contrast, certain other systems view assessments and tests as far less peripheral and problematic. In many, examinations exercise a dominant influence over the entire system and the lives of the students and teachers therein. Some operate with long-established inspectorate bodies. National assessments of students' achievement have become prominent in a number of OECD countries. There are those where considerable faith is placed on results achieved in standardized test scores, these being sometimes justified too on equity grounds, on the argument of their supposed objectivity over other, more personal "subjective" forms of assessment. These different examples do not, of course, add up to a single dimension of attitudes towards measurement. The point here is that there are clear differences of educational and cultural philosophy, exposed perhaps as sharply in this domain as in any other in education.

A further important dimension involves the varying purpose and object of evaluations and assessments. Taylor, describing *Universities under Scrutiny*, identified a triad of purposes of assessment as fundamental:

> "First, it is undertaken to rank and certify individual performance. Within this category come national and external examinations, such as those conducted by lecturers themselves, state or nationwide external examinations such as the General Certificate of Education, the *Baccalauréat*, or, at the other end of the spectrum, the *Doctorat d'Etat*... A second sub-category of assessment comprises that undertaken for purposes of educational

> diagnosis and curriculum evaluation. Here again, there are several levels... A third mode is the monitoring of institutional and system performance. It is this category of assessment activity that is currently prominent. Here the unit of comparison is not the individual student, but a department, unit, faculty, college, polytechnic, university, or even the whole higher education system (p. 84)."[13]

These are not entirely exclusive categories; assessments of individual achievement, for instance, might be one means by which to judge institutional or system performance. There is growing interest in a number of countries in evaluating not only students, institutions, and systems but also teachers. There is an important question highlighted by these distinctions: how far can the measures and assessments developed for one purpose be transferred for use to meet another such purpose? It might be tempting to hope that all the functions for which evaluations are needed – such as of individual students' learning for diagnostic reasons, for summative and certification reasons, measures for the assessment of national standards, or of variability of provision or performance for planning and investment purposes – can be met with a single measure, more or less aggregated. That would certainly meet the *desiderata* of convenience and cost-effectiveness but it will, for the most part, fail the crucial test of *validity*.

In the above citation, Taylor was referring to higher education only, though the categories have a general application. Noting that, a further dimension is added by including and comparing all the different levels and settings of education and training. Some methods of evaluation and assessment that are quite inappropriate for primary schools will be a normal feature of university life. That which suits vocational apprenticeship does not necessarily transfer to the secondary school pupil. Adult students regard certain forms of assessment that youngsters are accustomed to as inappropriate.

One source of difference between these different levels and settings is the degree to which they rely exclusively on assessments of cognitive performance rather than take account of other talents and competences. In some countries, there is growing interest in "records of achievement", seen as a means of incorporating other talents and accomplishments to provide a more comprehensive student profile than, for instance, examination results alone. The OECD report on provision and curriculum issues for 16 to 19 year-olds identified the cognitive preoccupation as evidence that education systems operate within more narrow bounds than employers and enterprises, in contrast with the common portrayal of the reverse case:

> "The skills and achievements that are involved in successful work go well beyond the cognitive-intellectual ones that are prized particularly in education; they embrace practical, organisational, interpersonal and sometimes artistic ones as well. This points to the need to re-evaluate the criteria of assessment within education at this stage [post-compulsory], to ensure that both access and achievement reflect not only different levels, but types of ability and skill (pp. 10-11)."[14]

This observation refers only to the post-compulsory level. The point is, however, more general in that preparation for adult life in all settings should involve a very wide array of competences and approaches. It is also a reality of many systems that the knowledge and skills that are formally assessed tend to receive recognition at the expense of others, arguably no less valuable. The objects and techniques of student assessment are thus matters integral to the success of educational policies in general.

Towards a culture of learning

The call for a vision of the knowledge, skills, and accomplishments that education is seeking to promote as comprising a broader array than the cognitive-intellectual is not to downgrade this domain but it is to expect much more of schools, colleges, and teachers. The already overloaded curriculum is thereby expected to accommodate still more major new missions and responsibilities. The limits of institutional tolerance may fast be approaching. To meet such manifold challenges and duties presupposes a learning culture that is serious and hard-working and that is open and innovative.

The policy strategies adopted to promote quality in education, including those for evaluation and assessment, should all contribute to the creation and sustenance of such a culture, both within individual institutions and system-wide. A recent OECD project on educational evaluation and reform strategies sounded a note of caution in its review of developments in Member countries that this was not characteristic of many reforms during the last few years:

> "In conclusion, if a strategy in favour of quality exists, it seems, at this time, to be oriented more toward a management designed to fulfil the student outcome objectives as set down, partially or totally, by mechanisms outside the school, than a whole and complete elaboration and implementation of a total and coherent school project by relatively autonomous schools."[15]

The exercise of accountability needs to work in the same direction as the ends being sought. In many circumstances, those will best be served by providing a supportive climate rather than a closely circumscribed agenda. In all circumstances, there should be reflection on, and review of, what those ends should be.

NOTES AND REFERENCES

1. Discussed in detail in OECD (1989), *Schools and Quality: An International Report*, Paris. A useful discussion of the quality issue in relation to higher education is contained in the relevant sections of OECD (1987), *Universities under Scrutiny*, Paris. Discussions of the school effectiveness literature prepared for the OECD are contained in OECD (1990), "The Teaching Process: Research and Policy", *The Teacher Today: Tasks, Conditions, Policies*, Paris, Chapter 4; and J. Scheerens, "Process indicators of school functioning", in *The OECD International Education Indicators: A Framework for Analysis*, OECD/CERI (1992).
2. Discussed in "Decentralisation and School Improvement: New Perspectives and Conditions for Change" (internal document).
3. See OECD (1989), "Initial Education and the Preparation of Youngsters for Active Life", *Education and the Economy in a Changing Society*, Paris, Chapter 2; and the discussion of certification and meritocracy in OECD (1985), *Education in Modern Society*, Paris, Chapters 3 and 4.
4. M. Skilbeck (1990), *Curriculum Reform: An Overview of Trends*, CERI/OECD, Paris.

5. Discussed in detail in OECD (1989), *Pathways for Learning: Education and Training from 16 to 19*, Paris.
6. OECD (1991), *Alternatives to Universities*, Paris.
7. OECD (1989), *Schools and Quality*, *op. cit.*.
8. The annual statistical publications of many countries report the relative lack of data on private education. The very incomplete coverage of statistics in the early childhood field is reported and reflected in OECD (1990), "Child care in OECD countries", in *OECD Employment Outlook*, Paris, Chapter 5; a joint activity between the OECD's Education Committee and Manpower and Social Affairs Committee has recently been established to improve data on training; an outline of the problems of data relating to adult provision, which remains relevant today, is contained in OECD (1977), *Learning Opportunities for Adults*, Vol. IV, *Participation in Adult Education*, Paris, Introductory Chapter.
9. A concise account of developments concerning international educational statistics is contained in the preface to OECD (1989), *Education in OECD Countries 1986-87: A Compendium of Statistical Information*, Paris.
10. OECD (1990), *The Teacher Today*, *op. cit.*, Chapter 2.
11. An overview of purpose and progress by 1990 can be found in N. Bottani and I. Delfau (1990), "The Search for International Educational Indicators", *The OECD Observer*, February/March.
12. U.P. Lundgren (1987), *New Challenges for Teachers and their Education*, Report to the Standing Conference of European Ministers of Education at their 15th session in Helsinki, Council of Europe, Strasbourg.
13. OECD (1987), *Universities under Scrutiny*, *op. cit.*.
14. OECD (1989), *Pathways for Learning*, *op. cit.*.
15. Project on Educational Evaluation and Reform Strategies, "General Report on Country Policies and Experiences: Draft Summary and Main Issues" (internal document).

Chapter 7

TEACHERS: THE KEY RESOURCE[1]

The foregoing chapters have established why teachers and teacher policies deserve a separate review[2]. Chapter 5 described how the ageing of the profession is a major factor giving rise to the prospect of possibly serious shortages. Chapter 6 described how improving educational quality has become a widespread priority and in this the role of teachers is pivotal. This chapter elaborates factors other than those outlined in Chapter 6 that are likely to prove influential in squeezing the supply of teachers that for many years has been in relative plenty. Because of such plenty, even surplus, the capacity of and output from initial teacher training was substantially curtailed in many countries. One of the very difficulties in meeting the problem of shortage is that it calls for the comprehensive revision of policy thinking in accordance with the new realities. Without necessarily invoking the language of "crisis", the education authorities of many OECD countries must now shake off the habits of an era of managing surplus.

In so doing, there may be a temptation to allow quantitative targets primacy over qualitative goals. This is surely a temptation to be firmly resisted. The progress already made over the 1980s in bringing quality issues to the forefront, the previous chapters have argued, does not mean that there is still not much to be done if education and training systems are to succeed in fostering the qualities of today's educated citizen throughout the population. The central point here is that the major burden of responsibility for all this falls on teachers. Successful reform is realised by and through them. It would be a tragically retrograde step if the qualitative concerns of the 1980s, instead of being brought to fruition in the years ahead, were to be sacrificed in the face of shortages through preoccupation with the primarily quantitative concern of finding sufficient numbers of staff to fill classrooms. And that in turn calls for major initiatives to enhance the attractiveness of the profession and teacher professionalism. This does not apply exclusively, of course, to those responsible for teaching in schools. The pivotal role of "learning agents" – be they teachers or trainers – applies no matter what the setting. Problems of ensuring an adequate supply of staff and of updating professional knowledge are increasingly to be addressed by policies across the board. That this chapter discusses in detail those teachers who come most clearly within the ambit of educational policies and who constitute the recognised core of the profession is not to imply that the other groups of teachers are of secondary importance. One challenge now is how to bring these other teachers and trainers into the forefront of policy scrutiny without jeopardising the very flexibility and expertise they already possess.

The shortage problem

Current shortages

Many countries already report general teacher shortages. As well as unfilled vacancies, there are also "hidden" shortages – unqualified teachers in post or those teaching "out of position" from their specialism[3]. The size of pupil/teacher ratios (PTRs) is also determinant of whether shortages become manifest with a given supply. Ireland, for example, is one country that reports continued surplus, exporting many trained teachers whose immediate employment prospects at home are poor. But there, comparatively high pupil/teacher ratios are maintained[4]. Germany is one of the few other OECD countries that until recently trained new teachers over and above immediate requirements[5] but the far-reaching developments in that country make the forecasting of capacity and needs a decidedly hazardous one.

Beyond the aggregates, there is the key question of the distribution of trained staff. Among the disciplinary areas where teacher shortages have for long been most problematic everywhere are mathematics and the sciences, which are subjects currently accorded special importance in the curricular policies of many countries. Vocational and technical subjects are today given a major share of the task of providing for the larger numbers of youngsters staying on beyond the compulsory leaving age. Yet, certain of these fields already face acute staff shortages, which may well become exacerbated with greater competition for specialists from other sectors of the labour market. It is in these same scientific and technological fields that the higher education sector is beginning to face serious problems of attracting high quality teachers and researchers, as potential recruits are tempted by more lucrative offers elsewhere, including with the growing internationalisation of skills markets, in other countries. Languages have an obvious and growing role to play in today's dynamic and interdependent world, as discussed in Chapter 5, and difficulties of teacher supply are being experienced in some countries here too. And there is the geographical dimension. Certain locations, whether inner-city districts or isolated rural communities or areas of high cost housing, have difficulties of attracting good staff and they experience the deployment of larger numbers of unqualified or inappropriately qualified teachers or else suffer higher rates of staff turnover.

Future prospects

The trends and prospects described in Chapters 4 and 5 could well exacerbate the teacher shortage situation during the 1990s. The "greying" of the teaching profession – the consequence of the major recruitment drives of the late 1950s and 1960s followed by the severe curtailment of intake from the mid-1970s (the timing differs by country) – is one such trend. Simply replacing the quickening losses through retirement will call for new recruitment drives. Meanwhile, many OECD countries struggle with the legacy of years of lean recruitment which substantially reduced initial training capacity and solidified in the public consciousness the image of a profession that offers few openings. Though the problems of replacing retiring school teachers tend to receive acknowledgement, the difficulties may well turn out to be no less acute in "third level" higher education in some countries.

The general labour market situation also has an important bearing on the success of education authorities to attract in staff from diverse sources – talented young graduates; those who have temporarily left the profession, many of whom are women; older adults with other professional experience. Emerging labour and skill shortages, as described in Chapter 4, thus pose their own headaches for maintaining teacher supply, as well as providing an important set of new challenges to education and training systems at large (which themselves probably call in

turn for greater numbers of staff). For one thing, competition from industry and commerce is affecting other types of service employment which have traditionally relied on substantial inflows of young adults, such as in the health sector. Teaching must be a profession attractive enough, therefore, to compete all round and not only with industry and commerce. The competition is likely to be especially acute in the technological subjects of vocational and higher education. And women, who have constituted such an important source of teacher supply to date, may well be attracted increasingly to the rewards and career possibilities being offered by other occupational and industrial sectors which are already targeting female workers in their efforts to avert shortages.

The balance of shortage and surplus is, of course, as much formed by *demand* as it is by teacher *supply*. Demographic variables play a significant part in shaping that demand. The common pattern is of continued falling student rolls in lower secondary schools which contrast with a partial revival of numbers at the primary level following the recent rise in numbers of births in some countries, and a still-growing demand for pre-primary education from working parents in many of them. At the same time, the cohorts of conventional higher education age, from which new entrants to teaching are mainly drawn, are beginning to fall as the demographic trough works its way through. But demand for teachers is also closely shaped by the aggregate effects of individual student choices, and the outcomes of policies seeking to influence those choices, and not only demographics. In the light of the targets currently being set in many countries for students' completion rates in the upper secondary level of education and their continued participation in further and higher education, problems of maintaining adequate levels of teacher supply might well be expected irrespective of the "greying" of the profession and the tightening general labour market for graduates. Taken together, these factors add up to a powerful set of reasons for giving high priority to the recruitment and retention of good teachers.

In response to shortages there is already a variety of policies and strategies being initiated in OECD countries to target different groups of potential teachers. These targets include higher education students deciding on future careers (especially those studying in shortage subjects), the already qualified who have left teaching (often women) who may be considering a return to the classroom, and entrants from "non-traditional" routes, especially experienced workers and specialists from other occupational backgrounds. A minimum requirement of success for strategies in all these cases is that such potential teachers know about employment vacancies, retraining opportunities for those seeking a career change, and any additional incentives directed towards them. Beyond the "information" dimension, a general condition for success in the efforts to recruit new staff is the widespread conviction that the teaching profession is an attractive one to enter *and remain in*. While the one component of continued teacher supply is the recruitment of new teachers, the other is the retention of good, experienced staff. In terms of the numbers involved, the latter aspect is likely to prove at least as important as the former, and has the added advantage of being potentially within the easier reach of policy initiatives. At present, most systems display the damaging characteristic that the main avenues of promotion are out of teaching altogether.

Conditions and rewards

The complex components of the profession's attractiveness

Teacher salaries are widely touted as the main determinant of teaching's attractiveness. Discussions with teachers, however, are as likely to elicit concern about factors such as their

professional contacts with others, public recognition of their professional worth, the possibilities for staff to see to a satisfactory conclusion all the tasks they are currently charged with, and opportunities (or their lack) for career development as they are satisfaction levels with financial rewards[6]. Salaries constitute a vital ingredient of teaching's attractiveness but they are only one. These diverse elements come together to make up the complex compound of teaching's attractiveness in different ways across OECD countries, though most systems share the difficulties of problematic status and rewards. In some, though, the profession still enjoys substantial prestige, rewards are relatively high, and competition for entry remains keen (as in Japan). Teachers' legal status differs – in some, especially those in Continental Europe (such as Denmark, France, Germany, Greece, Italy, Luxembourg, Portugal, Spain) they are tenured civil servants. In many others, they are not. In nearly all countries, the pupil/teacher ratio has fallen steadily (even here there are exceptions and past trends do not, of course, predict future developments), but the shared tendency nevertheless hides marked variations. Despite data deficiencies that preclude precise comparisons, the actual magnitudes of PTRs differ significantly from country to country.

The present inadequacies of data also make valid international comparisons of teacher salaries difficult to draw. Comparisons of unadjusted salary scales leave from account the variety of other benefits (such as special housing allowances, health schemes, and special working hours and arrangements) that vary widely across countries and even across types of teaching posts within countries[7]. With the rising affluence enjoyed in general over recent decades, the purchasing power of teachers has tended to rise rather than fall. Questions that then arise are: how quickly? How have they fared compared with other occupational groups that arguably compete for bright graduates and qualified teachers? There are no single or simple answers to these questions.

A selection of the evidence on past salary trends has been compiled as part of an OECD analysis of teacher supply and demand (the recent real increase in teacher salaries in the United States has already been mentioned in Chapter 5). That analysis found the picture to be mixed but in general to confirm that there has been comparative slippage in financial rewards even though teachers are not worse off in absolute terms nor adhere to a single pattern:

> "The most common pattern is one of an increase in average real salaries over the past twenty-five years. In Germany and Japan, the increase has been quite substantial. In most instances, however, the rate of increase has lagged behind gains in the average productivity of labour. Teachers have shared in part the overall productivity increases in the economy. In the absence of adequate measures of changes in the productivity of teachers (and of civil servants generally), it is difficult to say whether these gains are appropriate or too low. However, average teacher salaries in many OECD countries have fallen from a ratio of 2 or 3 times GNP per capita to 1 to 2 times GNP per capita over the last twenty-five years... Whatever the standing, teacher salaries are perceived as low, in some cases excessively low, in many OECD countries. In a recent comparison of salaries, the European Community found that at the beginning of a career in teaching, the salary for primary teachers in the United Kingdom stands at 81 per cent of the average manufacturing salary. At the end of a full career in teaching, salaries in most of the EC countries studied are slightly above the average manufacturing salary. Although the figures should be interpreted as illustrative, the comparisons suggest that the increment is relatively small, given the qualifications required to become a teacher... The comparative picture across the OECD is... diverse and complicated."[8]

In the light of the emerging problems of teacher shortages, evidence about past trends in any case gives only limited insight in addressing recruitment and retention issues in the future.

From this perspective, the relevant questions are now not so much how teachers have fared in the past but whether the profession is attractive enough to recruit growing numbers of talented, motivated entrants and retain the skilled and experienced among their present ranks in the new labour situation of the 1990s.

Important though salaries undoubtedly are in contributing to the profession's attractiveness, non-pecuniary conditions and rewards are also crucial. Among these factors, the general *isolation of teachers from each other and their surrounding community* is a continuing source of strain though this feature is more typical of some systems than others. Its effect is not to be underestimated in accounting for levels of departure and "wastage" from the classroom. This isolation can significantly limit the room for effective responses from the profession to the educational challenges already outlined, and especially of generating the "culture of learning" so needed in education and training. Few, if any, other occupations place such faith in the organisational unit of the solitary professional. Nor is it well understood, especially by those who have never taught, how tiring good teaching actually is. A further general problem is that so long as teachers choose to follow their vocation and remain in the classroom, the actual nature of teaching tends to change little throughout the career even if new tasks and groups of students are added with passing years. That suggests the need for pedagogical innovation and the greater recourse to more flexible forms of team teaching. It also suggests that the very nature of careers in teaching should be addressed as a matter of priority.

Developing careers

The development of clearer career structures and of more diversity in professional duties represents a promising avenue in efforts to improve teaching's attractiveness. As with the conditions of work already addressed, pecuniary and non-pecuniary sides are both involved. Concerning salary progression with seniority and experience, the evidence across countries provides a mixed picture as before:

> "If they remain in teaching, secondary teachers in Denmark and Italy can expect their salaries to increase by 50 per cent, while secondary teachers in England and the Netherlands will double their salaries. Teachers in England reach the top salary at age 35. In Ireland and France, the top salary is reached at age 45. Salary structures in other OECD countries are just as varied... Japanese teachers can triple their salaries over 35 years while teachers in Australia, New Zealand, Sweden and the United States progress along a flatter age-earnings profile and reach the maximum salary in a much shorter time. The implication is that countries have adopted salary schedules which provide quite different structures of monetary incentives to prospective and current teachers."[9]

What is relevant for this chapter are not the exact magnitudes or ages cited which, in any event, evolve as part of the usual negotiation process. It is instead to show that there is a significant margin for the exercise of policy choice not only in setting levels of pay but also in how these are structured and progress over careers. How beneficial is it, for instance, for the able teacher to be rapidly rewarded with tangible pay increases if the maximum is soon attained and the only alternative for improvement is promotion out of the classroom? Yet starting salaries must also be set high enough to encourage young graduates to enter in the first place. Either way, the pressure is on for improvements in rewards. Because of limits on expenditure growth constraining immediate salary increases, particular attention should be given to seeking imaginative and rapid improvements in the other aspects of teachers' careers. Extending career opportunities and fostering diversity in teachers' work are key elements in increasing both the attractiveness of the profession and the quality and flexibility of the education provided. They

imply re-examination of the predominant practice whereby teachers continue to work full-time, full-year, up to a fixed retirement age. For experienced teachers, more flexible combinations of classroom teaching with other roles and duties, within schools and in enterprises and administrations outside, can yield substantial benefits and offer the additional boost to efficiency of reducing fatigue and "burn-out". Concerning the early career years, in most systems there is much that could be done to ensure a more satisfactory introduction to teaching through well-developed induction, incorporating training, support, guidance, and observation. In some, the plight of young staff, whether in schools or higher education, experiencing extended periods of demoralising duty on temporary contracts and assistantships is arguably no more beneficial to the pupils and students than to the personnel in question.

Career diversity can be encouraged in other ways. Higher education programmes and qualifications – whether mainly for teaching or other fields – might be developed that are characterised by "polyvalence", aiming to permit a greater degree of mobility in and out of the profession. Especially within federal countries, there sometimes exist substantial obstacles to mobility through lack of reciprocal recognition of professional qualifications and/or such benefits as pension rights from one jurisdiction to another. In an era of shortage, there is surely a strong case to be made for the review of such barriers to career and geographical mobility. Indeed, some OECD countries are confronting the even more complex questions of the reciprocal recognition of rights and qualifications internationally – most obviously but not exclusively within an integrated Europe. And there are initiatives seeking to enhance career diversity through encouraging higher levels of entry through "non-traditional" routes. Increasing the flows of teachers into and out of the profession may well prove desirable from the vantage point of enhancing teacher supply, introducing "new blood", and maintaining motivation and morale so long as the quality of the "unorthodox" entrant is high. Measures of this sort will be self-defeating, however, if they result in a net flow **out** of teaching or if they conflict with the underlying aim of increasing the attractiveness and diversity of careers for all teachers.

Selected equality and quality issues

Equity

Extending career opportunities means not only to enhance diversity of tasks and responsibilities for all teachers but also to improve representation and promotion chances for certain sections of the teaching profession. Of these, two stand out – women and minority teachers. The former are markedly under-represented in promoted and leadership posts despite comprising the majority of classroom teachers in most countries. Teachers from ethnic and cultural minorities rarely get even that far; they are seriously under-represented in the profession as a whole compared with numbers of minority students in school populations. Arguably, this is an even more intractable problem than rectifying the near-universal under-representation of women as school principals and their deputies. But in fact many fewer disadvantaged minority students advance to the higher education programmes from which teachers are selected. Without the role models that minority teachers provide, fewer students are encouraged to so continue with their studies. The circle can be a vicious one.

The composition of the teaching force and the equity of existing methods of selection and promotion, far from being marginal matters beside the urgent task of recruiting sufficient numbers of teachers in the face of shortages, are integral to it. Concerning women teachers, so divergent are their career patterns and prospects from those of men that the special situation of

female teachers is a general policy concern – for obvious reasons of workplace equity, but also with the view of ensuring that sufficient numbers of women continue to be attracted into teaching in the future. They will need to be convinced that teaching is still an attractive option, including that promotion opportunities are available on an equitable basis for those who seek it, despite the weight of present evidence to the contrary[10]. That implies paying close attention to selection criteria and promotion procedures. If imbalances change little despite that attention, the case for quotas must at least be considered. Where teacher appraisal is concerned, whether following more or less formalized procedures, particular care must be given to avoid implicit discrimination on grounds of gender, especially when many in leadership positions are male while women comprise the majority of the staff below them in the hierarchy. In general, as in other occupational sectors, improved child-care facilities may prove a valuable additional incentive to teachers who are mothers of young children.

Some indication of the lack of sufficient numbers of qualified minority teachers is apparent in the strategies adopted in OECD countries. In several Nordic countries, mother tongue teachers are pooled across municipalities or else children from a particular minority linguistic background are brought together in a single school. In certain urban school districts in the United States, the number of qualified minority teachers falls sufficiently below demand that the restructuring of staff has been required to make greater use of minority teacher aides. The use of teacher aides from minority groups can be seen more positively than as a temporary response to teacher shortages in terms of being one means of recruiting minority staff into schools. There are also special training programmes; some afford opportunities to acquire full teaching qualifications, others are less ambitious, aimed at developing in teacher aides the capacities necessary to assume greater instructional and administrative responsibilities[11]. In all, such measures still tend only to scratch the problem of the lack of minority teachers throughout education and training systems.

Quality

The question of the quality of new recruits and practising teachers is inextricably related to all the matters dealt with in this chapter. It has been stressed, in particular, that teacher supply and demand cannot be regarded as a predominantly quantitative matter; the aim must be to maintain an adequate supply of high-quality teachers, professionally competent and temperamentally suited to classroom life. Often, public discussion of teacher quality is preoccupied with the academic abilities of the student intake to pre-service courses and of new entrants. Doubts are commonly expressed. The professional demands of teaching today do indeed suggest the need for teachers to be intellectually able, competent in their field and able to keep abreast of new developments, and to apply their knowledge and skills to new situations as the need arises. Establishing the learning environment that provides a genuine education of quality calls for very high levels of professionalism, reflection, and co-operation between staff with different specialisms.

Preoccupation with the academic backgrounds of new entrants offers, though, only a limited guide to the ingredients of teaching quality. The contrast frequently drawn, for instance, between the need for teachers to possess sound academic credentials versus good practical preparation for classrooms and workshops is a false one. Teachers should possess mastery of subject matter *and* be able to transmit that successfully to the students in their charge. Pedagogical skills, educational understanding, and an appropriate personality for teaching are all contributing factors. Oddly, recognition of the importance of all these ingredients of good teaching tends to remain inversely related to the level and prestige of the different educational

settings. In higher education for instance, as the previous chapter observed, inefficient and ineffective pedagogical practices such as mass lectures with poor or minimal attention to individual student needs are commonplace. In some countries, still more is it commonplace that no training or qualification to teach students is required. Yet such neglect of teaching as such would be unthinkable for primary school teachers.

That said, there are serious concerns in many countries about the effectiveness of the teacher education and training currently provided, whether it is pre-service on in-service. For *pre-service* teacher education, the calibre of the student intake is a much-discussed source of concern, which reflects the current attractiveness of the profession no less than the programmes of teacher education on offer. But the quality of those programmes and the staff responsible for them cannot be neglected either. How well have countries found the happy medium of attracting good students to well-designed programmes? The very definition of "well-designed" pre-service programmes is, of course, at issue. There are diverse practices between countries concerning such matters as the length and organisation of pre-service training, the nature and duration of incorporated school experience, the actual role of teacher education and training institutions, the interpretation and place of educational theory in programmes, and the balance of subject preparation and pedagogical understanding. All pre-service programmes face difficult choices concerning how best to introduce student teachers to the burgeoning demands and challenges they will subsequently face without diluting courses to the merely superficial.

Concerning the *continued* or *in-service* education and training (INSET), which is a fundamental element in the human resource development strategies of all enterprises – the educational enterprise is no exception – it is often *ad hoc* in organisation, patchy in provision, and with significant variations in quality. The policies and mechanisms to be established in order to maintain high levels of professional knowledge and skills resemble those in any major organisation or sector committed to training; indeed they possess a particular urgency in education. This is, first, because of the institutional obstacles preventing teachers maintaining contact with outside developments and, second, because *all* teachers are high-level professionals, *all* needing to keep their knowledge and skills up to date. There are some very concrete issues to be addressed of the selection of teachers for INSET and the organisation of their replacements when this comes within teaching time. There are those of the organisation and financing of such provision. And there are the questions of programme design where the balance must be struck between institutional and school-based programmes while allowing the best practice of each to feed into the other. A variety of purposes must be accommodated – to keep teachers abreast of new developments in their fields, to train for new policy priorities and measures that staff are responsible for, to foster career development and allow the stimulus of "refresher" courses, to encourage the constant evaluation of the educational enterprise in their capacities as "reflective practitioners".

Enhancing professionalism

Important as organisational questions and measures for teacher education and training undoubtedly are, at least as important are the much more intangible factors of ethos and professionalism. To bring about a teaching force that is well respected, where competition for entry is keen, and which enjoys the dynamic interaction among its members and between them and the wider community, will have at least as great an impact on the quality of teacher education, pre- or in-service, as any legislative arrangements. Herein lies one of the outstanding difficulties confronting teacher policies today: just as the call on teacher professionalism is

greater than ever, the growing number of demands on their time and energies risks diluting their opportunities to develop it accordingly.

Those demands stem from policies aimed at increasing both the quality of education and equality of educational opportunity. The fact of reform and constant change itself implies substantial investments of time and reflection by the teaching force. These are manifest, specifically, in the policies discussed in the foregoing chapters. In a number of OECD countries, for example, teachers have acquired extensive responsibilities in the design and implementation of curriculum reform and in new forms of student assessment. Certain policy priorities call for "horizontal" strategies that depend on teachers for their success. One is the general expectation that they impart an understanding of, and positive attitudes towards, the worlds of employment and work, giving guidance to their students as appropriate. Knowledge and understanding of other countries has now to be promoted by teachers, schools, and colleges as part of efforts to foster "internationalisation". While not new, it takes on fresh significance in the light of the rapidity of recent international developments and the growing interdependence in the world economy. Targeted programmes – such as multiculturalism, equality of the sexes, and the integration of disabled pupils into mainstream schools – all represent far-reaching areas of reform where the teacher's role is pivotal. The successful introduction of information and communication technologies into classrooms depends on their informed and imaginative application by teachers. And new moral and social questions are being added to their remit: to enhance awareness of the environment and pollution, to educate about drug abuse and AIDS, to be concerned about values and citizenship, to offer pastoral care and advice.

Each of these listed above alone implies ambitious programmes of pre- and in-service teacher education and the reorganisation of learning. Pre-service teacher education must accommodate these diverse competing developments in ways that do not jeopardise the practical usefulness of this phase to prepare for entry into the profession nor dilute the quality of programmes. Many such developments are better prepared for instead through continuing in-service education and training but current opportunities of this sort tend to be woefully inadequate to the task. And such is the range of new demands, at present introduced discretely and piecemeal, that the comprehensive review of institutional structures and classroom organisation might well be needed, taking account of teachers' duties – individually and collectively – in their entirety. What tends to be forgotten by the advocates of any of the single areas of reform listed above is that *all* teachers are expected to promote all these strategies, and *all* at once (even if individual teachers do specialise). Alongside worries about salaries and insufficient social recognition, teachers are increasingly voicing concern about the sheer availability of time and about their preparedness as a body to do justice to these different challenges. How, then, can the extension of the teacher's role constitute a source of professionalism based on expertise rather than be simply burdensome additions of ever greater numbers of new responsibilities?

NOTES AND REFERENCES

1. This chapter draws substantially on the conclusions of OECD (1990), *The Teacher Today: Tasks, Conditions, Policies*, Paris, which is the final report of the Education Committee's Working Party on the Condition of Teaching together with its more detailed analysis of teacher supply and demand, and the results of the CERI project on teacher training.
2. One sign of the growing recognition of the importance of teacher policy issues in the 1980s was that the European Ministers of Education, under Council of Europe auspices, met at the 15th session of their Standing Conference in Helsinki in May 1987 to discuss "New Challenges for Teachers and their Education".
3. The problem is a general one throughout most OECD countries, especially in shortage subjects and unpopular geographical/community sites. It is seen perhaps most acutely on a general scale in Spain and Portugal which report as many as 4 in 10 teachers to be either unqualified or "out of position". See B. Gonzalez Dorrego (1988), "Les enseignants en Espagne", and P. da Cunha (1989), "Teachers in Portugal" (OECD working documents).
4. OECD (1991) *Reviews of National Policies for Education: Ireland*, Paris.
5. E. Jeuthe (1989), "Teachers in Germany: The Employment of Teachers against the Background of Teacher Surplus, the Ageing of the Profession, and a Decline of Student Numbers" (OECD working document).
6. In the OECD's work, these different elements of the condition have been documented most thoroughly in "Teacher Demand and Supply: The Labour Market for Teachers" (forthcoming in 1993).
7. For a good discussion of the methodological issues and data deficiencies involved in international comparisons of teacher salaries, see S. M. Barro and L. Suter (1988), "International Comparisons of Teacher Salaries: An Exploratory Study", report prepared for the Office of Educational Research and Improvement, U.S. Department of Education, Washington, D.C.
8. "Teacher Demand and Supply: The Labour Market for Teachers", *op. cit.* Based on: F. H. Nelson (1987), "Survey and Analysis of Salary Trends, 1987", American Federation of Teachers, Washington, D.C.; S. M. Barro and J. W. Lee (1986), "A Comparison of Teachers' Salaries in Japan and the United States", Center for Statistics, U.S. Department of Education, Washington, D.C.; ECSC/EEC/EAEC (1988), *The Conditions of Service of Teachers in the European Community*, Brussels and Luxembourg.
9. "Teacher Demand and Supply: The Labour Market for Teachers", *op. cit.* Based on: S. M. Barro and L. Suter (1988), "International Comparisons of Teacher Salaries: An Exploratory Study", *op. cit.* and ECSC/EEC/EAEC (1988), *The Conditions of Service of Teachers in the European Community*, *op. cit.*
10. The extent of female under-representation is charted in detail in OECD (1990), *The Teacher Today: Tasks, Conditions, Policies*, *op. cit.*, Chapter 2. It shows that while some countries report modest improvements in the proportions of female principals, in some the trend in recent years is for women to obtain even fewer such leadership posts.
11. These examples are taken from country reports prepared under the auspices of the current CERI project on Ethnic, Cultural, and Linguistic Pluralism.

Chapter 8

THE DISADVANTAGED AND UNDER-REPRESENTED: EXTENDING QUALITY LEARNING TO ALL

Equality objectives in debate and policy

No single trend in policy debate and developments

It has already been proposed that the time is ripe for concern for the situation of the disadvantaged and under-represented in education and training to be brought centre stage once more. The importance of learning for participation, economic and social, means that the costs of missing out have now become very high – to the individuals concerned, their families, and, in aggregate, to countries at large. The economic costs to the community of the continuing existence of failure are certainly high; insufficient use by a country of its potential talents and skills, particularly at a time of emerging shortage in labour markets, is likely to prove to be an expensive waste. The social implications are equally serious and carry their own high economic costs, including to taxpayers. As important today are the cultural and democratic arguments for ensuring that all individuals, young and old, and all social groups, are given the opportunity to engage in the participation that education and training allows.

To make equity concerns a foremost policy priority can be viewed as a realignment of aims after a period when qualitative, efficiency, and economic criteria have been especially prominent. Skilbeck, in his CERI review of curriculum reform, supports this view:

> "There has been a tendency in the 1980s to submerge long-term concerns for access, opportunity, equity and fairness in education to economic imperatives. It would be dangerous and unprincipled to continue along this track, given the realities of our societies. Significant educational disadvantage continues to occur. For curriculum and pedagogy, a next step is to seek a new synthesis which directly and concurrently addresses:
>
> *i)* The policy drive towards economic restructuring;
> *ii)* The technological revolution; and
> *iii)* The universalist principle embedded in the claim that every person has educational rights and freedom (p. 79)."[1]

But, apart from wide differences in policy and approach across countries that render broad generalisation hazardous, the trends charted in Chapter 5 suggest that it would be a mistake to see the 1980s as a decade when the concern for equity was lost from view or when no redistribution of educational opportunities occurred.

The expansion of vocational and technical programmes and training for young adults with problems of labour market insertion, coupled with the squeeze on spending in higher education and research seen in some countries, can be interpreted as a redistribution of funds towards the

less privileged. Raising participation in pre-primary and post-compulsory settings to near universal levels can also be viewed as extending opportunities, previously the preserve of the more privileged, to a broader cross-section. The policy responses to the social and economic distress caused by the very high levels of youth unemployment that set in from the mid-1970s in many countries, were, it can be maintained, more focused on actual socio-economic disadvantage than the "middle class" egalitarianism of the decade before, preoccupied as it was with widening access to positions of academic privilege. And it can also be argued that perspectives on equality have broadened considerably compared with the debates of the 1960s that so turned around the socio-economic composition of pupils and students in school and college systems. Gender equality, the integration of pupils with disabilities, multiculturalism and bilingual education have all been more prominent in the 1980s in most countries than they were a quarter of a century ago. Adult education and training, including issues connected with functional illiteracy, have received more attention latterly in many countries than they did before.

A common tendency among progressives in the 1960s was to pose the aim of raising "standards", especially among low achievers, as in conflict with their own ideals. This was surely mistaken. Interest in the cognitive outcomes of education cannot be inimical to the aim of realising greater equality of opportunity. On the contrary, only by such a focus is there realistic hope of raising achievements to satisfactory levels. It is a disservice to the disadvantaged to avoid confronting their learning difficulties, when these occur, through offering "soft" options. But it is also pointless to bemoan the fact that too many leave education with very little to show for it, at considerable public expense, unless the learning needs of this group become a central priority.

Education "makes a difference"

While these different examples demonstrate that policy developments and trends have followed complex patterns, there is no denying that the existence of underachievement and disadvantage remains and probably will always remain in some form. Education cannot be expected to solve these problems by itself. Such problems may become most manifest in classrooms in the form of learning difficulties and low student motivation, but they are the result from the interaction of deep-seated economic, social, and educational factors that can amount to a powerful and vicious circle. But, and again there is a contrast with previous debates, a positive reappraisal has occurred of the effectiveness of schools to combat disadvantage, at least in addressing the factors that are specifically educational[2]. This is in contrast with the pessimism that became widespread in the course of the 1970s, considering that there was little to be done by schools in the face of the resilience of socio-economic inequalities.

One summary of the changing assessment of the lessons of research was provided in an OECD study by Marshall Smith, himself a co-author of the famous Jencks study[3] that fuelled the earlier pessimism:

> "The *Equality of Educational Opportunity* report by Coleman, and that by Jencks *et al.*, *Inequality*, fanned a debate about the relative effects of schools and family background and home experience. To sociologists, the low percentages of variance explained by differences among schools indicated the lack of effect that schools might have. To economists, the percentages of variance explained were less important than the coefficients which suggested that there were major differences between the lowest and highest achieving schools, even after home background was controlled. To reformers, none of the debate made much sense since the data only reflected what existed, not what might exist.

All agreed that the family background and experience of children are important. All also agreed that there was lots of variation within schools and that the psychologists should work on this. The general resolution with respect to the potential effects of schools is more on the side of the economists and reformers. Coleman, in a recent report on public and private schools, makes the current argument that variations in schools can make a significant difference."[4]

Schools in particular, and education and training in general, do "make a difference", indeed they can make *the* difference when their efforts are developed in tandem with those of their various policy partners and agencies.

Outstanding problems of disadvantage

The seriously disadvantaged and those "at risk"[5]

The previous section showed that there has been continued concern for educational disadvantage in policy-making throughout recent years, and that, in a number of important respects, that concern has broadened with the passage of time to accommodate new perspectives and interests. But major problems remain to be addressed. Foremost among these are those who are most seriously disadvantaged in socio-economic terms.

In Chapter 4, it was already indicated that there are ways in which the situation of the most seriously disadvantaged, in socio-economic and educational terms, has become worse despite – and, in part, because of – a variety of favourable trends, including falling unemployment levels. The number of semi-skilled and unskilled openings in the labour market for those with poor educational records are in decline across OECD countries. The vacancies associated with skill and labour shortages have not been filled for the most part from among the ranks of the unemployed[6]. The share of long-term unemployment among the total numbers of jobless has either been maintained or else has risen over the latter years of the last decade, in some cases dramatically[7]. The incidence of male unemployment lasting 12 months or more as a percentage of men out of work, for instance, rose from 60 to 75 per cent in Belgium between 1983 and 1989, with corresponding figures of 43 and 72 in Ireland, and 55 and 68 in Italy. The difficulties of those with the weakest on the labour market seem to have become more entrenched. The analysis of the correlation between educational attainment and unemployment[8], also referred to in Chapter 4, suggests that the gap is getting wider and that lack of adequate educational attainment is a factor strongly associated with joblessness: "The largest difference", to reiterate, "is usually found between the least educated and everyone else".

The changing incidence of poverty also confronts education with problems on a new scale. In spite of all the well-rehearsed difficulties of agreeing where lines should be drawn in defining poverty, and of measuring it once these are agreed, there is consensus that the elderly now comprise a significantly smaller proportion of the very poor than in times gone by, and that children make up a correspondingly larger share. The poverty gap – the difference between the average income of the poor and the poverty line in general – is now more pronounced among families with children than the elderly:

"... in all countries but Germany the elderly poverty gap is smaller than that for families with children; dramatically so in Sweden where the elderly poverty gap is only 3 per cent of the poverty line. The gaps for families are largest in Australia, Canada, and the United States, amounting to about one third of the poverty line."[9]

Thus are education's most important clientele – the young – also the section of the population increasingly likely to be among the most needy. And of these, the same OECD report identified more specific, overlapping characteristics of those most in need – single-parent families, minorities, those in persistent rather than occasional poverty.

The OECD Social Policy Ministers, meeting in July 1988, concluded in their press communiqué that the problems of the seriously disadvantaged are particularly worrying, endorsing the view that the relative situation of this section of the population has worsened in contrast with the general affluence enjoyed by the majority:

> "...new forms of poverty and/or disadvantage also affect a growing number of people. Current economic and social trends are excluding significant regions and groups in the population from the mainstream of economic life and the opportunities which it offers. Unless care is taken, this process will continue. Ministers are deeply concerned about this exclusion and the poverty which often accompanies it (p. 53).... social and economic policies will need to counteract such exclusion by establishing participation in work, community and voluntary activities as an important objective, alongside those of assuring access for all to health care and education and the opportunity to earn an adequate income. Such a shift in emphasis – which is already beginning – will require closer and more active co-ordination of social, labour market, and education and training policies (p. 54)."[10]

Dead-end education and programmes and dead-end jobs tend to be mutually reinforcing for the young "at risk" and the unemployed. Concerning adults, the expansion of enterprise-based education and training has so far benefitted mainly higher skill workers, especially younger men, while the low-skilled and older workers, and women, tend to miss out. Their training is commonly, at best, for short-term adaptation. Experience with the introduction of new production equipment has shown that those with low skill levels *can* be trained for more complex jobs[11]. There are the problems of older workers whose skill levels may not so much be low as obsolete. The recently-published OECD "New Framework for Labour Market Policies" summarised the situation of such different groups thus:

> "Many countries have had to come to terms with a serious and protracted problem of long-term unemployment or labour market detachment of disadvantaged groups, such as ethnic minorities, innner-city youth, or displaced older workers with obsolete skills. These groups tend to remain unresponsive to demand pressures if their employability is not enhanced through public policy action (p. 87)."[12]

Education and training figure prominently in the policy action that can be foreseen.

The geographical dimension

The Social Policy Ministers explicitly referred to the regional dimension of disadvantage. The contours of the geographical distribution of disadvantage can be drawn more precisely still through reference to particular areas and communities within regions. Compound problems are experienced more starkly than elsewhere, perhaps, in decayed inner cities[13]. But the problems are not peculiarly urban – poor communities coexist within larger affluent areas, the phenomenon of rural poverty is a familiar one. The geographical distribution of socio-economic opportunities is often closely mirrored educationally. The areas suffering the severest hardships tend to have difficulties in, for instance, attracting and keeping good teaching staff or providing adequate educational facilities in well designed and maintained buildings. The problems are thereby compounded.

New forms of inequality of educational opportunity along geographical and community lines can prove extremely difficult for policies to reach or counteract. As provision and opportunities have been extended to larger sections of the populations of OECD countries, then the tendency has become more pronounced of the better-off adopting geographical mobility as a strategy to maintain their educational advantage. The nature of local educational provision, that is, has become a criterion of growing importance in the choice of housing location. In addition, in many countries, there is greater involvement by parents and the local community in the running of schools. Some countries place particular emphasis on enhancing parental choice[14]. However beneficial, one effect of all these factors together is that there are pressures maintaining the disparities of student intake and levels of parental support between schools. In democratic societies, the exercise of choice and voluntary participation is to be applauded. Of concern, nevertheless, are the fortunes of the pupils and students in areas typified by socio-economic and educational difficulties. The OECD project on disadvantaged youth in inner-city areas consists of case studies of areas which have mounted programmes in spite of, and in response to, their compound socio-economic hardships. But as with the educational examples referred to above, an outstanding general problem for disadvantaged youth and older adults is that those areas suffering most tend to lack the infrastructure of training provided by enterprises, and public labour market programmes must struggle hard to make good that lack.

Adult illiteracy

International Literacy Year (1990) has drawn widespread attention to the fact that the illiteracy problem is one shared by all countries, no matter how well developed their education systems, but there is less clarity on precisely what "the problem" is. Definitions and estimates of illiteracy are notoriously variable. UNESCO estimates and projections from the early 1980s put adult illiteracy rates at between 2-3 per cent for the industrial countries, a comparatively low relative figure but representing very large numbers of people in absolute terms[15]. Countries vary in the magnitude of their problems and in official assessments of their gravity. Some countries, according to a CERI report[16], have recently come to express serious concern: these include Canada, France, the United Kingdom, and the United States. In others, awareness of the problems is long-standing as in Italy, Portugal, Spain, and Turkey. A few, including Japan, regard it as relatively minor.

The problem is a compound of traditional forms of illiteracy giving rise to difficulties of functioning in society through lack of reading and writing skills, and the problems encountered with the "rising threshold" of the minimum knowledge and skills now sought after in the modern world[17]. The nature of the "information society", as discussed in Chapter 4, gives this special twist. Just at the time when the written word and the activity of reading face growing competition from other media, which means that those with a weak foundation in these aspects of literacy have alternatives (and yet which serve to reinforce the reading and writing difficulties still further), the level of competence and understanding demanded to function in the economy and society at large increases. No matter how well the initial education system succeeds in imparting literacy, all competences fade in the absence of practice and application. A new CERI study of adult functional literacy places emphasis on this finding, arguing that it is facile always to find fault with the basic education system, especially as the relevant provision was that in place ten, twenty, or thirty or more years ago concerning older adults with literacy problems:

> "To summarize, illiteracy in advanced nations is not a problem that is restricted to a group of mostly drop-out youths, but one that includes also a significant number of older

workers. The implications of this finding are fundamental. Remedying to the literacy problem cannot be seen simply in terms of restructuring secondary education so as to cut down in the rate of high school drop-outs, but must also be seen in terms of restructuring remedial programs that are targeted to an older, adult population, including a sizeable share of the *employed* adult labor force. To do so, however, assumes a better understanding of what illiteracy is and what the extent of the problem is (p. 15)."[18]

Adult literacy programmes, whether in adult education or in enterprises, will thus always have a key role to play.

Lines of policy response

Targeted programmes and general policies

There are no simple policy solutions to the problems described above; certain aspects of educational disadvantage can appear almost intractable in the face of the polarisation and exclusion as described by the Social Policy Ministers, the rising minimum thresholds of competence needed for full participation in OECD societies and economies, and the subtle social mechanisms whereby the already-privileged maintain their educational advantages. Yet, the importance for countries now to exploit their talents and capacities to the full means that policy strategies to combat disadvantage are urgently needed. These are likely to involve educational institutions and authorities in integrated action with the other relevant policy partners and agencies. Both targeted measures and reforms of mainstream provision will be called for.

Such is the sheer variety of targeted measures that only a few observations about them can be reported here. A number of evaluations point to the importance of early learning and that the efficacy of school interventions tends to decline with the age of the student as other social influences come to play a more dominant role. The primary and pre-primary phases are thus crucial. The factor of high demands on students may well be essential to avoid a downward spiral of low expectations being fulfilled in practice. Teachers, as discussed in the previous chapter, are key players in the process. And the more that teachers can develop "whole school" policies, with the active contact and positive support of the community, the more solid the foundation on which progress can be built rather than placing undue reliance on individual initiatives. One practical problem here is that all manner of innovations have been shown to flourish when part of "whole school" policies. To avoid fragmentation, therefore, the institution must in turn integrate the variety of "whole school" targets into one coherent approach. The full involvement of local employers can make a vital difference in breaking down education's social and cultural isolation in ways that can pay substantial dividends for the disadvantaged student, as illustrated by the success enjoyed by "compacts" in some countries. And the target populations must themselves be "empowered" in the definition and implementation of programmes that are for them.

Minority students

These considerations apply with particular force for the ethnic and cultural minorities among whom educational disadvantages are most concentrated. There are some signs in the United States that, despite disappointing progress on overall achievement levels, significant gains have been experienced for Black and Hispanic students. Consistent with the finding that education's power to effect change seems to drop with age, the gains among minority young-

sters have been most marked at the elementary and junior high school levels. Despite all the reported concern about low levels of achievement and insufficient retention in that system, dropout rates have declined over the past decade; for Blacks, the dropout rates "have declined considerably"[19]. Even so, these groups still lag behind. And improved achievement levels among younger students do not necessarily convert in later years into college entrance, one effect of which is the extremely low representation of minority teachers on school staffs. Data on foreign enrolments in European countries suffer from problems of comparability and definition but one or two trends stand out and can be reported. As there has been a decrease in numbers of enrolled national pupils and students in schools since the mid-1970s, so has there been an increase in the numbers of foreigners and this in all the types of education surveyed. In all the countries studied, however, the rate of foreign enrolment in special primary education is much higher than it is for nationals. A SOPEMI report has described how foreign enrolment tends to be higher in the less favoured or less prestigious forms of education, although the situation in this respect would seem to be improving in several countries[20]. A further factor that makes generalisation so hazardous in this field is that there are so many different minority groups, all with their own special configuration of needs and problems. Large multi-ethnic education systems accommodate scores of different languages and cultures. Some of these, such as the Asian students in the United States, achieve at least as well as, if not better than, their majority classmates[21].

The linguistic and cultural elements in programmes and policies raise issues that are among the most controversial and political in the educational field. There are contrasting concepts at play, in terms of the role of the mother tongue, and of cultural separateness, integration, or assimilation, that touch at the heart of today's societies and the relations between the different groups which comprise them. Far-reaching change in Central and Eastern Europe gives added impetus to the debates, where the role of education and mother tongue practice are seen as central, both in real and symbolic terms. It should be recognised, however, that the crux of the matter under discussion is not then equality of educational opportunity in the traditional sense of opening access to programmes and provision previously enjoyed predominantly by the privileged few. Demands for cultural determination and the exercise of the mother tongue in schools stand, irrespective of evidence about access or achievement.

Disabled students

In similar fashion for students with disabilities, the weight of the argument for integration, which has been the dominant policy trend of the past decade or more in many countries, is primarily one of *entitlement to participation*– in education, the economy, and society – rather than necessarily about equality in a more traditional sense[22]. The two are, in any event, closely related; integration of the disabled, it is claimed, lays the path to successful learning and hence ensures greater equality of educational opportunity. Yet the rationale for integration would stand even in the face of, say, evidence that under some circumstances separate provision leads to larger learning gains. Recently, fears have been expressed that interpretations of educational quality that stress competition among pupils and schools in terms of cognitive achievement have led to reluctance among some schools, parents, and communities to extend the same efforts towards the integration of disabled students as hitherto. And whatever the evidence about progress towards integration, it still needs to be recognised that "special needs" pupils and students require special efforts and arrangements, with concomitant implications for resources, however that is translated in terms of organisation and staff.

Mainstream reform

There is an important place for special measures and targeted programmes as part of overall strategies to reach the disadvantaged and under-represented. But the most effective strategies will have as their main focus the mainstream provision of education and training where the aim is to provide high-quality learning to all. This, indeed, is the sense of the integration movement discussed in the previous paragraph. The aims of quality and equality come together: a high-quality learning environment is one that challenges and stimulates all students; an education system that allows only the limited exercise of equality of opportunity is in need of improvement. Both the broad aims of raising quality and of increasing equality point to the need to develop a culture of learning, where higher order knowledge and skills, curiosity and industriousness, and co-operation are encouraged in an open and tolerant spirit. That in turn suggests that many conventional practices and traditions should be open to sustained scrutiny. If far too many youngsters are coming to the end of their education with little to show for it, root-and-branch reform is needed rather than change at the margin. If current curricular offerings appear irrelevant and dull to a worryingly large minority of youngsters, alternatives must be considered, no matter what diversification this implies. An intensive high-quality start, with well-resourced schools imbued with a culture of learning, can reap larger dividends over the long term than a wider extension of mediocre provision.

With the exercise of choices and options, especially from the post-compulsory level on, the differences of prestige and recognition among the streams and programmes are also a major barrier to change. The OECD report on *Pathways for Learning* described it for 16-19 provision thus:

> "... the tendency to steer low achievers and/or low-ability students towards vocational courses has frequently counteracted efforts to raise the status and prestige of vocational credentials. More recent developments also show the difficulties of achieving egalitarian goals. At first sight, for example, the fact that some countries have succeeded in recent years in having middle-class students in certain vocational streams and a higher proportion of working-class students in general education may be viewed as a positive development. However, different conclusions can be drawn when it is seen that quite often the privileged groups tend to concentrate on those vocational streams which open up better opportunities for employment, whereas many of the less privileged groups enrol in general education as a second choice, because of the lack of places in the more rewarding, selective vocational options. Such developments reveal the importance of student strategies – particularly from the middle and upper social strata – in maintaining an advantaged position (p. 10)."[23]

It suggests that one of the most important targets for policy attention and action in combatting disadvantage is the very prestige of programmes. Resourcing, staffing, and official support of the different tracks and streams, rather than always seeking to alter the distribution of choices *among* unchanged programmes, are the kinds of policy variables through which to combat the sociological "iron law" whereby the settings wherein the less privileged congregate seem subject to inevitable loss of recognition and attractiveness.

Relatedly, there are the policies concerning the financial support given to students and trainees that can exercise a significant influence over participation, especially for the disadvantaged for whom additional learning can represent a very expensive item. It is important that such policies are consistent with the general aims of education and training policies. If it is hoped that more of the disadvantaged or adults, for instance, are to pursue their studies, then the availability of student support should reflect this rather than be largely directed to the young

or the well-off. It is important that such support be aligned with other forms of income so that there is no major financial incentive to discontinue studying. Concerning entry to the labour market and support for the unemployed, the active nature of education and training is widely seen as preferable to the passive inactivity of unemployment, though entrenched patterns are difficult to break down:

> "In spite of recent efforts to improve the balance, most OECD countries still spend more on passive than active measures, and more on the 'social treatment of unemployment' than on programmes which raise the competitive strength of the unemployed in the open labour market ... [which] suggests a special emphasis on placement, mobility, and training measures (p. 87)."[24]

In higher education, perhaps the most notable trend has been the massive increase in financial support available to students, the major changes coming in the 1960s and 1970s in most countries. This was combined with a tendency to shift from academic merit to financial need as the main criterion for financial support, and, latterly, a move from grants to loans. How far these two trends are consistent with each other might be questioned; especially in countries where the amount of student borrowing is substantial, there are fears that the costs of continued education may be detrimental both to participation rates and to the effectiveness of study[25].

The nature of the problems suggests that the quality of initial education is the paramount priority. Success at this stage builds later success and vice versa. But no matter how successful the initial education and training system in meeting the aims addressed in this chapter, much remains for subsequent provision. Prominent among the manifold arguments in favour of lifelong learning through recurrent education and training is that of offering "second chance" opportunities, or even "third" or "fourth" chances, too. And just as the very nature and enterprise of schooling is in question when too many young people slip through with little to show for their classroom years, so should the nature and scale of post-secondary provision and the conditions of access and student support be closely scrutinised. At present, education and training for adults tend far too much to be the province of the already-educated.

NOTES AND REFERENCES

1. M. Skilbeck (1990), *Curriculum Reform: An Overview of Trends*, CERI/OECD, Paris.

2. Recent examples of United Kingdom research bearing this out are P. Mortimore, P. Sammons, L. Stoll, D. Lewis, and R. Ecob (1988), *School Matters*, Open Books; and D. J. Smith and S. Tomlinson (1989), *The School Effect*, Policy Studies Institute. An example of the awareness of the special importance of effective schools for disadvantaged youngsters is seen in the U.S. Department of Education booklet in the "What Works" series (1987), *Schools that Work: Educating Disadvantaged Children*, Washington D.C.

3. C. Jencks *et al.* (1972), *Inequality: A Reassessment of the Effect of Family and Schooling in America*, Basic Books, New York.

4. M. S. Smith (1986), "Educational Reform in the United States", OECD Working Document prepared for the joint Italy/OECD Conference on *The Vital Role of Teachers*, Rome, 6-8 May 1986.
5. A major CERI project has recently been launched on "Children and Youth at Risk".
6. OECD (1990), *Employment Outlook*, Paris, Chapter 1.
7. OECD (1991), *Employment Outlook*, Paris, Statistical Annex, Table N.
8. OECD (1989), *Employment Outlook*, Paris, Chapter 2.
9. OECD (1989), "Low Income and Poverty", Working Party on Social Policy, Annex 1 (internal document).
10. Communiqué issued from the meeting of the Manpower and Social Affairs Committee at Ministerial level, 7th July 1988 and printed in OECD (1988), *The Future of Social Protection*, OECD Social Policy Studies No. 6, Paris.
11. OECD (1989), "Education and Structural Change: A Statement by the Education Committee" (document on general distribution).
12. OECD (1990), *Labour Market Policies for the 1990s*, Paris.
13. This has been the subject of an OECD project bringing together the perspectives of education authorities and those of local programmes for economic and social renewal under the title "Disadvantaged Youth in Depressed Urban Areas". The cities which were case studies for this project were Barcelona, Hamburg, Glasgow, and Metz.
14. Documentation includes "Parental Choice in the United States" and other national reports, and a synthesis report of this material "Choice of Schools: A Guide to the Documentation" (internal documents).
15. Reported in "Meeting Basic Learning Needs: A New Vision for the 1990s", Background document for the World Conference on Education For All, Thailand, 5-9 March 1990.
16. OECD/CERI (1992), *Adult Illiteracy and Economic Performance*, Paris.
17. This concept featured prominently in the analysis contained in OECD (1989), *Education and the Economy in a Changing Society*, Paris.
18. L. Benton and T. Noyelle (1992), *Adult Illiteracy and Economic Performance*, CERI/OECD, Paris.
19. U.S. Department of Education (1989), "Dropout Rates in the United States: 1988", National Center for Education Statistics, Office of Educational Research and Improvement, NCES 89-609.
20. OECD (1988), "SOPEMI Report 1987" (document on general distribution), Annex B.
21. As described in the overview of developments in higher education contained in *The Chronicle of Higher Education Almanac*, September 1989. See also OECD/CERI (1987), *Multicultural Education*, and *Immigrants' Children at School*, Paris; and OECD/CERI (1989), *One School, Many Cultures*, Paris. A CERI report on evaluations of multicultural initiatives in schools is currently under preparation as part of the activity on ethnic and linguistic pluralism.
22. See OECD/CERI (1985), *Integration of the Handicapped in Secondary Schools: Five Case Studies*, Paris; and OECD/CERI (1991), *Disabled Youth: From School to Work*, Paris.
23. OECD (1989), *Pathways for Learning*, Paris.
24. OECD (1990), *Labour Market Policies for the 1990s*, *op. cit.*
25. For a fuller discussion, see OECD (1990), *Financing Higher Education: Current Patterns*, Paris, Chapter 3.

Chapter 9

OVERVIEW AND QUESTIONS FOR THE FUTURE

Summary of the main issues

High-quality education and training for all

The title of the 1990 meeting of the OECD Ministers of Education – *High-quality education and training for all* – contains the key themes developed in this report. While the text concentrates most on the areas of policy responsibility that fall conventionally within the ambit of education authorities, an underlying argument throughout is that OECD countries must become "learning societies", *embracing all forms of education and training*, if they are successfully to meet the challenges they confront as the 21st century approaches. An overly narrow educational approach is unlikely to work.

Such education and training must be of a *high quality*. This applies to school provision, where the policy drive for improvement has been especially marked in recent years, but the requirements of excellence and relevance are no less important in vocational, further, and higher education and in the training provided by public bodies and private enterprises.

Moreover, the benefits of learning should be extended *to all* – the long-standing equity concerns combine with the compelling economic fact that OECD countries simply cannot afford to allow large pools of their potential talent to lie unexploited. Together, these argue for the position and interests of the educationally under-represented to become prominent policy targets in the 1990s. These targets embrace the under-represented because of socio-economic disadvantage, minority status, gender, or disability; they also include adults – relatively neglected by the concentration of educational policies on the young – mature students, especially those with an inadequate initial education or the illiterate, those displaced by economic and technological change and in need of retraining, the retired and semi-retired.

Combining these different themes, the argument for OECD countries to organise the diverse opportunities for learning on a *lifelong* basis, for all the manifold purposes and population groups that call for it, becomes overwhelming. Education and training should be widely available and enjoyed recurrently throughout each person's lifespan. This does not imply any relative downgrading of the education provided for children and the young in favour of their elders. It is instead a matter of reinforcing *both* initial and recurrent education and training in ways which recognise and reinforce the special purposes and complementarities between the two.

Education and training in a changing world

That organised learning – education and training – has a fundamental role to play in ensuring the health of modern societies and economies is undoubted. How that is best achieved

is nevertheless complex and often ill understood. Difficult questions remain to be addressed – what are the precise links between education and today's social and economic development? How to overcome the stubborn inequalities of interest in and take-up of provision so that education and training become genuinely "for all"? How to finance the ambitious and exacting agendas that the broad aim of becoming "learning societies" defines?

Many of the economic, technological, and social changes currently in train serve directly to underscore the pivotal role of education and training. The rapidity of structural and technological change and the decline in unskilled and semi-skilled work call for the continual renewal of knowledge and skills, beginning from a starting point where the minimum threshold of competence for full economic and social participation rises constantly. Modern work processes imply the fostering of a broad range of human capabilities including the creative, co-operative, informed, versatile, analytical, and open-minded. To promote such attributes is scarcely compatible with education and training systems weighed down by bureaucratic procedure, and typified by fear of innovation and "teaching to the test", in mere reaction to external pressure. They instead imply highly professional and confident programmes, staff, and institutions. No matter what the setting of education and training in question, the overall aim is the promotion of a "culture of learning".

Other contemporary economic and social developments reinforce the main point. Many countries already report skill shortages that could worsen in coming years, perhaps even causing continued progress and prosperity to falter. Unemployment levels remain high in some countries, especially in Europe, and there are the older workers most vulnerable to redundancy and lay-offs. The education and training of these different groups are of particular importance if countries are to exploit fully the talents and experience at their disposal. Women constitute a vital target of education and training policies – for their own economic, social, and cultural participation and as an integral aspect of using each country's economic potential to the full. The international dimension takes on growing importance for national policies, and developments in relations between countries and world regions continue to change at breakneck pace. This dimension touches education and training profoundly whether it concerns the development of expertise in international skills markets, the search for new sources of labour supply in the face of shortages, or efforts to raise educational quality to avoid slippage in intense world-wide competition. Today's "information society" presupposes widespread familiarity with new technologies. Just as importantly, it calls on people to make an informed and discerning selection from among the welter of sources and large quantities of information currently generated, as well as to withstand the excesses of a media-dominated culture.

These different developments reinforce the need for widespread provision of education and training, whether for youngsters or adults. But not all discernible trends facilitate the delivery and take-up of learning opportunities. For example, the growing section of the workforce of OECD countries on "untypical" schedules – the female part-timer, the expert consultant, disadvantaged workers in unstable, secondary labour market jobs, the semi-retired – means that many adults are outside the structures and careers where education and training are commonly and most readily organised. There are the general problems of socio-economic polarisation, exclusion, and poverty that so concerned the OECD Social Policy Ministers in their discussions when they met in Paris in 1988. For those so affected, education and training too often offer little. And there are features in the evolving position of women and family life, including the female "double burden" of having increasingly to combine full involvement in paid work with their frequent continued domination of domestic responsibilities, as well as the growing incidence of family breakdown and lone-parenthood, that can have a far-reaching impact on the propensity to learn for all of those, children and adults, involved.

The "quiet revolution" in educational participation

While the 1960s remain embedded in the consciousness of many as the decade of educational expansion, the 1980s may come to be viewed in future years as an era of a "quiet revolution" of expansion. Combining all pupils, students and trainees, teachers, support staff, and administrators is to arrive at very large numbers together engaged in the learning enterprise. Trends in the rates of participation in the programmes and settings that lie outside the period when school attendance is obligatory tell a story of the entrenchment of the common pattern being a prolonged educational career beginning in infancy and continuing up to the early twenties or even beyond. Participation in adult education and training grows apace.

Given their scale, it is scarcely surprising that structures are so often unwieldy and bureaucratic, apparently sluggish to change and innovate. New student clienteles and challenging tasks and expectations are continually added to the range of duties with which education and training are charged. Searching questions need thus to be asked about the ability of the established structures and organisation of provision to meet this "quiet revolution". It needs also to be considered how feasible or desirable it is to extend ever longer the initial education and training phase which, in combination with the generally lengthening retirement period, sees working life increasingly compressed in an intensive middle period of the lifespan, itself typified by a growing number of career changes.

Questioning such lifecycle arrangements can be on grounds of educational, social, or economic efficiency but financial considerations may be even more immediate. To the extent that such lifecycle patterns reinforce the worsening dependence ratio of the non-active to the active, it is likely that all social expenditure, including that for education, will be put under even greater pressure than it already is. And contemporary social trends result in increasing demands for spending on items such as pensions and health, just as extra funding is called for in the education and training fields. Major initiatives to invest in learning, against the background of the generally low levels to which capital spending in education has fallen in recent years, or to raise the attractiveness of teaching through greater rewards and incentives, must confront these harsh financial realities. They loom as major issues for the 1990s.

Raising educational quality

In recent years, "quality" has become a watchword for policy strategy in many OECD countries. The specific drive to improve schooling has increasingly widened, bringing in the other forms of education and training. In part, the widespread pursuit of qualitative improvement derives from the perception that all is not well, raising the question of how provision and achievement can become "better". But constructive, and not only negatively-inspired, interpretations of quality are needed, seeking to identify more clearly than hitherto the *qualities* that are most relevant for young people and adults as the 21st century approaches, as well as effective means to these ends.

Such interpretations must arbitrate and balance all the different components that contribute to good education and training and be compatible with the general aim of realising greater equality of opportunity. One such balance is between cognitive aims and those of fostering the non-cognitive moral, attitudinal, affective, aesthetic, and social attributes. Knowledge and skills are both important. There is need to clarify the appropriate balance of academic and more practical, employment-oriented content, as this varies by level and by type of student or trainee. In doing so, misleading assumptions must be avoided such as that "general" programmes have no employment relevance or that "vocational" courses have little place for theoretical content or the personal or social development of the student. The rigid divides and entrenched curricu-

lum boundaries are blurring. The search to raise quality can usefully pay close attention as well to those practices at the classroom and institutional levels that have proved most effective, and to the ways in which general policies can best promote such practices. To these ends, the lessons of research should be freely drawn on – knowledge about problems and solutions has increased enormously over the past two decades or so while modern information and communication technologies can aid the diffusion of such knowledge in new and exciting ways.

Despite the strides made in improving the knowledge base of education and training through research, the amount of R&D is still very low indeed for a sector of such size. The call for schools and colleges to be innovative, to keep abreast of developments within education and in the world outside, and for teachers to perform as high-level professionals – well-informed and able to co-operate in solving complex problems of learning and management – presupposes a substantial amount of R&D activity as a normal part of educational practice, much of which will be at the local level. And all those involved in education and training need access to sound, comprehensive data and indicators on areas of common concern for policy and practice rather than defined simply for administrative convenience. Evaluation and assessment, which have received much prominence in many OECD countries in policy strategies to raise quality, should essentially work towards the same ends; they constitute an important part of the constant activity of diagnosis, comparison, and analysis that underpins improvement.

Teachers – the key resource

The nature of and policies towards the teaching profession have moved into the spotlight in many countries. A principal reason for this derives precisely from the priority that qualitative improvement has received latterly; the major burden of responsibility for change lies with those at the teaching/learning interface – the teachers themselves. Urgency is added to the situation, however, since many countries face the prospect of staff shortages, after years of relative surplus and lean recruitment. Contributing factors are the ageing of currently practising teaching forces, the foreseen shrinking size of the conventional higher education age cohort from which many trainee teachers are drawn, and the general tightening of the labour market in which competition for talented recruits, including women who have constituted such an essential source of supply to date, will intensify.

The ambitious aims and targets implied in realising a high quality education and training for all could thus be jeopardised were the drive for reform to be halted through preoccupation in years to come with the merely quantitative concern of finding sufficient numbers of staff for classrooms, lecture halls, and workshops. Hence, the need to enhance the attractiveness of teaching becomes pressing, in order both to attract talented recruits from higher education and from other occupational backgrounds, and, equally importantly, to retain the best practitioners in the face of competition from other sectors. Salary levels are one obviously crucial aspect of teaching's attractiveness. But they are still only a single element of the complex compound which also includes such factors as social and occupational recognition, the possibilities for exercising varied tasks and responsibilities and for professional renewal in well-developed career structures, as well as overcoming isolation from colleagues and the community.

An outstanding difficulty confronting teacher policies today is that, just as the need to enhance teacher professionalism is greater than ever, the growing number of demands on them can dilute their time and energy in any one of the many discrete areas where their role is pivotal. Teachers are given an ever-expanding brief, in part as a consequence of the decentralisation and institutional autonomy being encouraged in some countries. The list of reform strategies includes curriculum development and evaluation, guidance and information about

employment issues, information technologies in the classroom, multiculturalism – to specify but illustrative examples. What can easily be forgotten with the introduction of the full array of these reform strategies is that *all* teachers must be prepared and able to integrate *all* of them into their daily teaching.

Disadvantage and failure

This report has argued that, as suggested by the theme of the Ministerial meeting, the 1990s should be a decade when substantial efforts are made to meet the learning needs of all, which implies giving priority to those who benefit least from education and training. A prominent aspect of the aim of raising the quality of education and training, as discussed above, is precisely to reach those whose participation and achievement levels are at present far too low. But this should not be taken to mean that equity issues have been ignored in education and training policies in recent years. Indeed, programmes and perspectives have broadened so that the preoccupation with socio-economic advantage and disadvantage has been complemented by the much greater attention given to such concerns as gender equality, the integration into mainstream provision of those with disabilities, multiculturalism and the education of linguistic minorities and migrants. Adult education and training, including issues connected with functional illiteracy, have received greater prominence in debate and policy in many countries latterly.

There may even be a danger that such diversification of targets and perspectives may amount to fragmentation, causing the interconnections between the different causes and consequences of disadvantage to become partially obscured. In fact, the socio-economic dimension of disadvantage remains fundamental and developments over recent years give grounds for concern. The situation of those with the lowest skill levels may well have worsened relatively; for example, correlations between educational attainment and the experience of unemployment show a widening gap between those with lowest attainment levels and everyone else. Similarly, with rising general affluence so is the position of those in poverty exacerbated, and education's most important clientele – the young – are among those increasingly counted among the very needy. The geographical dimension of socio-economic inequalities presents acute problems for education and training policies because certain communities come to experience compound hardships, and these can be closely mirrored by the opportunities and provision for learning available in those areas.

Policy responses will involve a combination of root-and-branch reform of mainstream provision and targeted programmes for the different priority groups. As regards initial education and training, the effectiveness of existing provision must be open to question if large numbers of youngsters come to the end of their stay with little of tangible worth. If they dismiss present curricular offerings as irrelevant, then alternatives must be considered, no matter what the diversification this implies. But it is also clear that there is a major role for recurrent education and training in providing "second-chance" or even "third-chance" opportunities for those who do slip through. An outstanding problem here is that, at present, education and training for adults still tend to be largely the province of the already-educated. One defining feature of a high quality education and training system is that it is able to interest and offer genuine learning opportunities to all potential students, including – nay, especially – those who at present benefit least.

Some open questions for the future

It is one matter to analyse trends and problems and to propose ideals to which education and training policies might aspire, conveniently buttressed by the supporting arguments in their favour, whether these be educational, social, or economic. It is quite another to match these ideals against existing realities, with all the dilemmas, conflicts, and problems that then naturally arise. The overview contained in this chapter can thus be extended through consideration of just such questions. They are perforce only a limited selection and all are open-ended:

- The query has already been raised against the viability of strategies that seek continually to expand initial education and training with the result that universal participation is aimed at as the norm of ever-older age groups. Countries are frequently compared in terms of percentages of, say, 18, 21 or 24 years-olds still embarked on their initial education careers on the implicit assumption that the higher the percentage, the more successful relatively are the policies in the country in question. Is this really the case? Questions arise here on grounds of equity (with ever rising participation rates, the low achievers thereby fall further behind), effectiveness (should so much depend on the achievements of initial provision or might an intensive, high-quality start followed by lifelong learning be preferable?), and sheer cost (continually expanding initial provision can worsen the activity/non-activity ratio, while a more fully-fledged recurrent education and training system should allow for a wider range of financial options). At what point should the aim be to encourage labour market entry, provided that opportunities exist for further access to learning later?
- Partly in response to the factor of financial stringency as well as possible emerging teacher shortages, high hopes are frequently laid at the door of information and communication technologies, including through distance education and training, on efficiency grounds. Yet, at the same time, the common if complex decline of traditional family and community structures, in tandem with examples of effective educational practice, suggests the teaching/learning interface, the "human factor" provided through expert teachers, and the community role of educational institutions may all be more vital than ever. Can the potential of technologies to enhance learning be tapped while safeguarding this human element and how can their pedagogical advantages be exploited in ways that are integral to good curriculum and teaching practice? Can they be exploited without exacerbating inequalities between high and low achievers?
- Understanding the very enterprise of learning, across all settings, becomes increasingly urgent. As consensus begins to be forged that education and training, including in the early formative years, must promote such attributes as curiosity, independence and leadership, ability to co-operate, tolerance, industriousness, and problem-solving under conditions of uncertainty, questions arise as to how effectively these are fostered under present arrangements in schools and colleges. Can such aims be met within massive education and training systems, often subject to powerful pressures towards uniformity in line with other such aims as equality of opportunity and accountability to the public purse?
- Though the realisation of greater equality of opportunity – if one adopts a strong interpretation of the concept – can mean entitlement to learning of equal value to that received by others, there must also be a large measure of diversity in curricula, programmes, and modes of access. This can be readily assured for post-compulsory, higher, and recurrent education and training. But how far should it extend down into the school system itself? If some students thrive in more practically-oriented programmes, how can these be developed while avoiding the inequalities of prestige and recognition

between different courses that have so dogged policies in the past? And to what extent should higher education programmes of all kinds become more directly vocational, leaving courses that are explicitly cultural and general to the adult education sector?

- The nature of the education/employment interface, and the appropriate policy-making and planning procedures in a context of multiple providers, partnerships, student/trainee needs, and labour market complexity will continue to raise a host of important questions in the years to come. While simplistic manpower planning models stand discredited, the alternative is not to leave all to the "invisible hand" of the market. How should the different balances be drawn? Should there be new realignments of programmes that have traditionally been labelled "general" and "vocational" as part of a wider process of reappraisal of the main purposes of education and training?
- Much of this report has been about *change*, at once economic, technological, social, and cultural as well as educational. It can be agreed that the education and training sectors should not react merely passively to external signals and pressures but should instead be important agents of creativity and change in their own right. Problems inevitably arise with a scenario of rapid evolution and flux. The burden of change lies with teachers and administrators who become increasingly hard-pressed to keep up – how rapid can change become before it is counter-productive? Is there a risk of confusion and chaos? And how to maintain coherence in a context of rapid change and a large degree of diversity of programmes and options?
- The final question of this chapter concerns the policy-making and decision-making process. The emphasis in this report has been on the need for a substantial measure of co-ordination and interaction between the different policy bodies, partners, and clienteles. As learning opportunities become increasingly diverse, so too is the need for dialogue and co-ordination multiplied. The encouragement of a multitude of partnerships can substantially enhance responsiveness to local and individual needs and conditions. But there are problems associated with the scenario of diversification, co-ordination, even integrated responses, in decision-making, which should not be ignored. From the viewpoint of education's clients – students, trainees, parents, employers, the public – how can clarity be assured in the jungle of potential options that emerge? Is there sometimes a loss of policy direction and boldness and how can this be put right? Who directs and assures co-ordination when it does not spontaneously occur? There are obviously no single answers to such questions, but they suggest that the very nature of policy-making in education and training in the 1990s merits full discussion.

STATISTICAL OVERVIEW

Within each table or chart, strict comparability between countries may be limited by differences of institutional arrangements, classifications, and data coverage. This short statistical overview draws on diverse Secretariat, as well as national, sources according to availability of data. It is thus intended to be illustrative of a number of principal facts and trends. The choice of statistics and indicators is highly selective, determined in part by data availability.

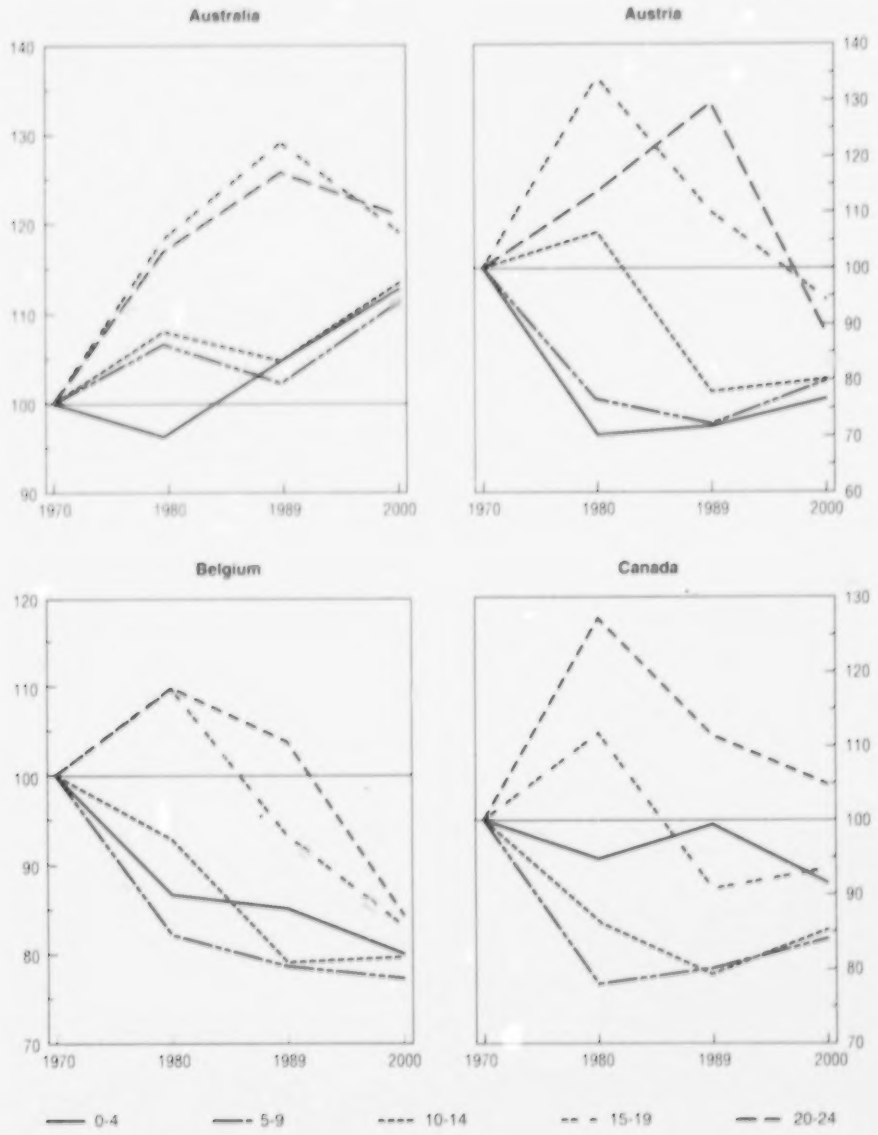
Table 1. **The age structure of the population – Figures and forecasts**

	0-14 years				15-64 years				65 +			
	1970	1980	1989	2000	1970	1980	1989	2000	1970	1980	1989	2000
Australia	28.8	25.3	22.1	21.3	62.8	65.1	66.9	66.9	8.3	9.6	11.0	11.8
Austria	24.4	20.4	17.4	18.5	61.6	64.2	67.5	66.5	14.1	15.4	15.1	15.0
Belgium	23.6	20.0	18.1	17.8	63.0	65.6	67.2	67.0	13.4	14.4	14.7	15.2
Canada	30.3	23.0	21.0	19.4	61.7	67.5	67.7	67.7	8.0	9.5	11.3	12.9
Denmark	23.3	20.9	17.2	16.0	64.4	64.7	67.2	69.1	12.3	14.4	15.5	14.9
Finland	24.6	20.3	19.4	17.4	66.2	67.7	67.4	68.0	9.1	12.0	13.2	14.6
France	24.8	22.4	20.2	19.1	62.3	63.7	65.9	65.6	12.9	13.9	13.9	15.3
Germany	23.2	18.2	14.7*	15.3	63.6	66.3	69.9*	67.5	13.2	15.5	15.4*	17.1
Greece	24.6	22.8	19.8*	18.7	64.3	64.0	66.5*	66.2	11.1	13.1	13.7*	15.1
Iceland	32.6	27.5	25.2*	21.4	58.5	62.6	64.3*	67.7	8.9	9.9	10.5*	10.9
Ireland	31.3	30.4	27.8	22.6	57.7	58.8	60.9	65.9	11.2	10.7	11.3	11.5
Italy	22.9	20.5	15.4	17.2	66.5	66.7	69.7	67.3	10.5	12.9	14.9	15.4
Japan	23.9	23.6	19.0	17.5	69.0	67.4	69.5	67.4	7.1	9.0	11.5	15.1
Luxembourg	22.1	18.6	17.1*	17.5	65.3	67.8	69.5*	66.2	12.6	13.6	13.4*	16.3
Netherlands	27.3	22.3	18.3	17.7	62.6	66.2	69.0	68.6	10.2	11.5	12.7	13.7
New Zealand	31.9	27.2	23.1	21.5	59.6	63.1	66.1	67.4	8.4	9.7	10.8	11.2
Norway	24.8	22.2	18.9	18.6	62.6	63.1	64.8	66.4	12.9	14.8	16.3	15.1
Portugal	28.8	25.3	20.7	21.1	61.9	63.3	66.3	65.5	9.3	11.5	13.0	13.4
Spain	28.0	25.9	20.4	19.6	62.5	63.3	66.5	65.8	9.5	10.9	13.1	14.6
Sweden	20.9	19.6	17.8	17.7	65.5	64.1	64.4	65.8	13.7	16.3	17.8	16.6
Switzerland	23.4	19.5	16.8	16.1	65.2	66.8	68.8	67.3	11.4	13.7	14.4	16.6
Turkey	41.8	39.0	36.6*	32.1	53.8	55.9	59.5*	62.9	4.4	5.1	4.0*	5.0
United Kingdom	24.1	21.0	18.9	20.4	62.9	64.1	65.4	65.0	13.0	14.9	15.6	14.6
United States	28.3	22.5	21.7	20.9	61.9	66.2	65.9	66.8	9.8	11.3	12.5	12.3
Yugoslavia	..	24.4	23.2*	..	..	66.2	67.7*	..	..	9.4	9.0*	..

.. Data not available
* 1988

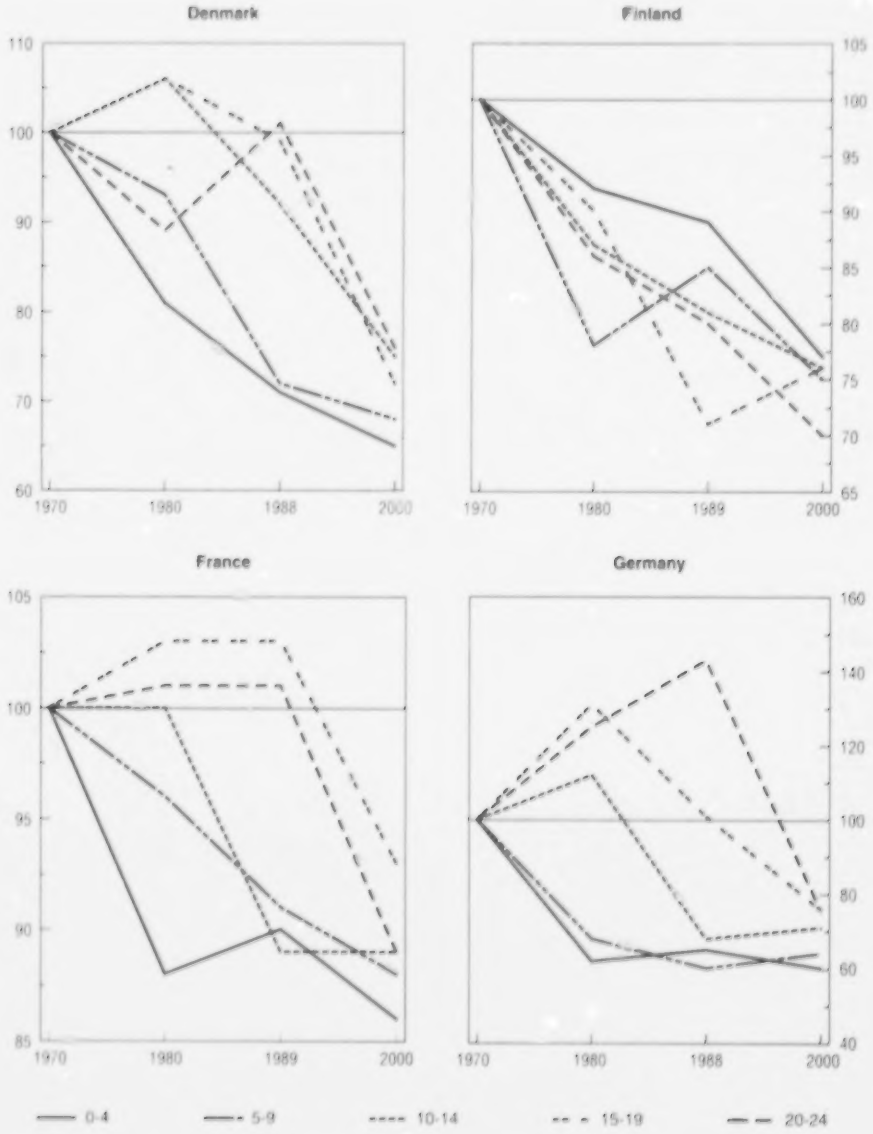
Note: Projections for the year 2000 are based on official OECD estimates.
Source: OECD demographic data bank.

Chart 1a. **The evolution of different age groups in the youth population: 1970 to 2000[a]**



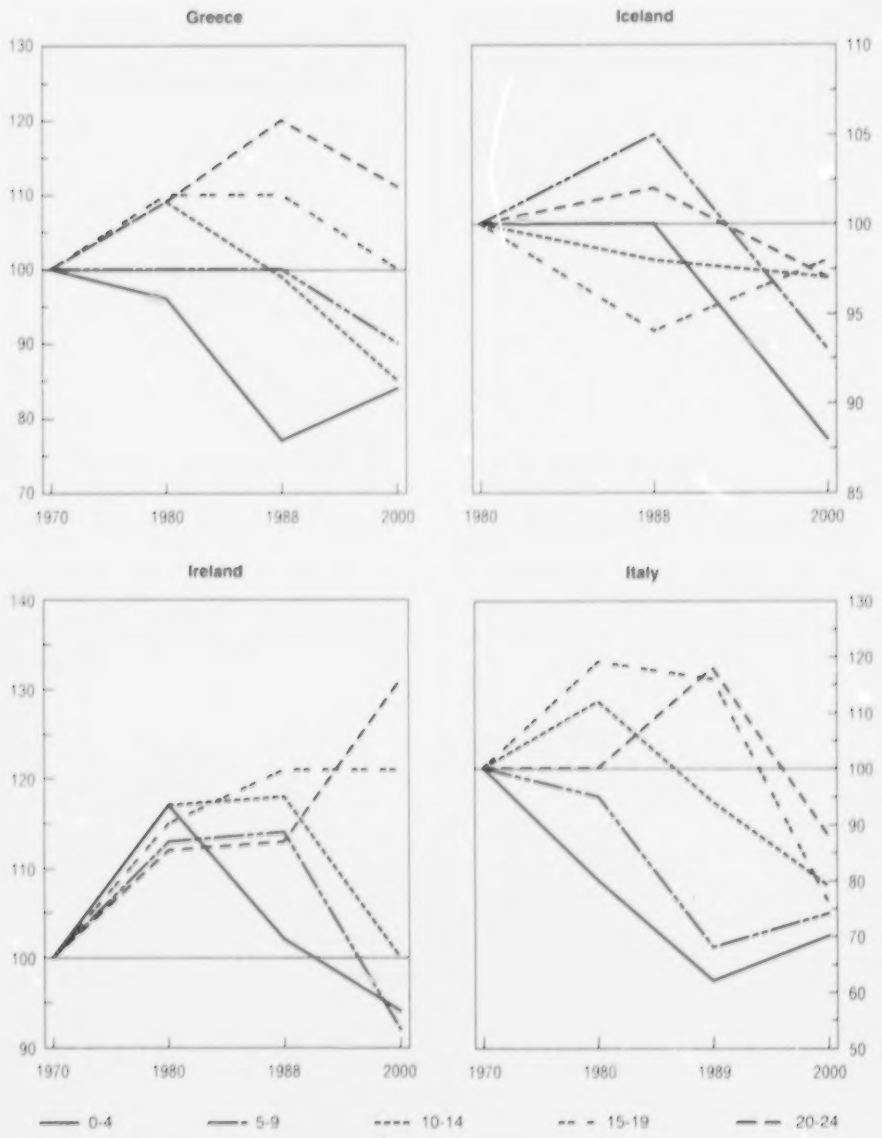
a) Projections for the year 2000 are based on OECD estimates.
Source: OECD demographic data bank.

Chart 1b. **The evolution of different age groups in the youth population: 1970 to 2000**[a]



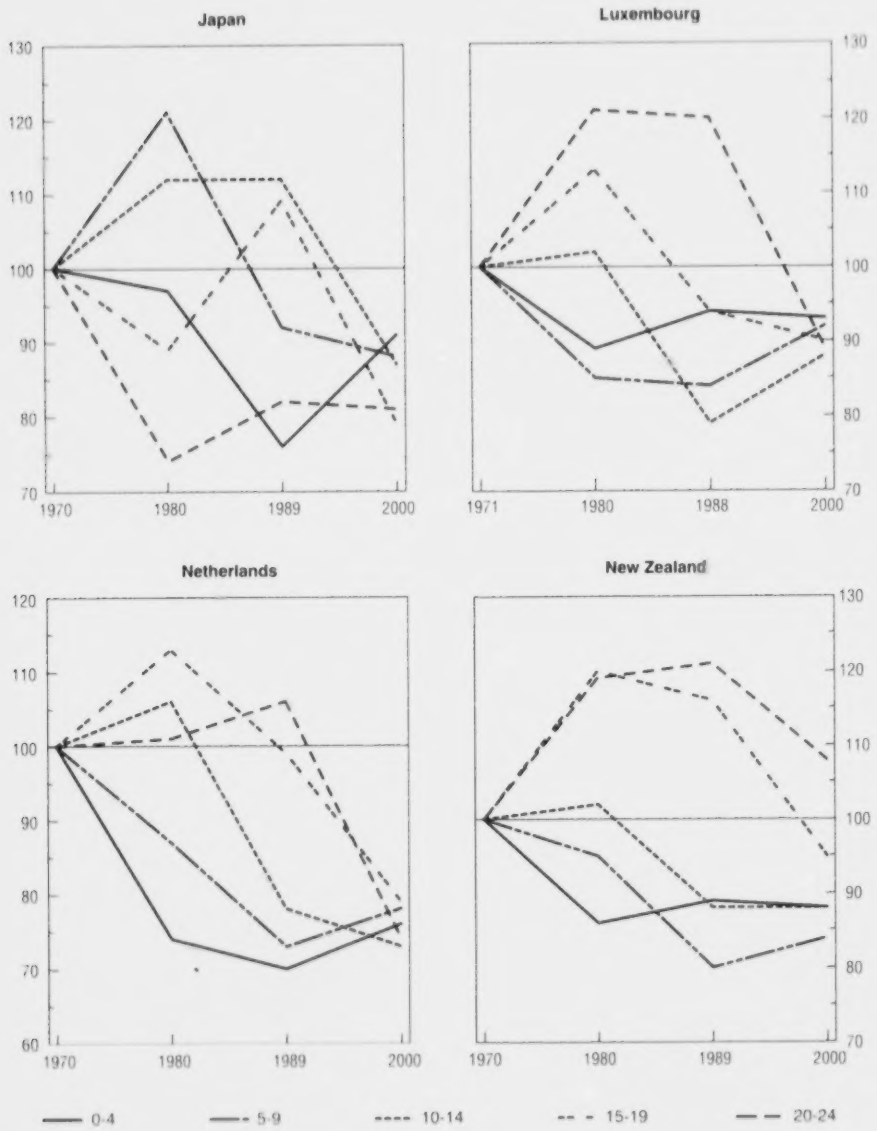
a) Projections for the year 2000 are based on OECD estimates.
Source: OECD demographic data bank.

Chart 1c. **The evolution of different age groups in the youth population: 1970 to 2000**[a]



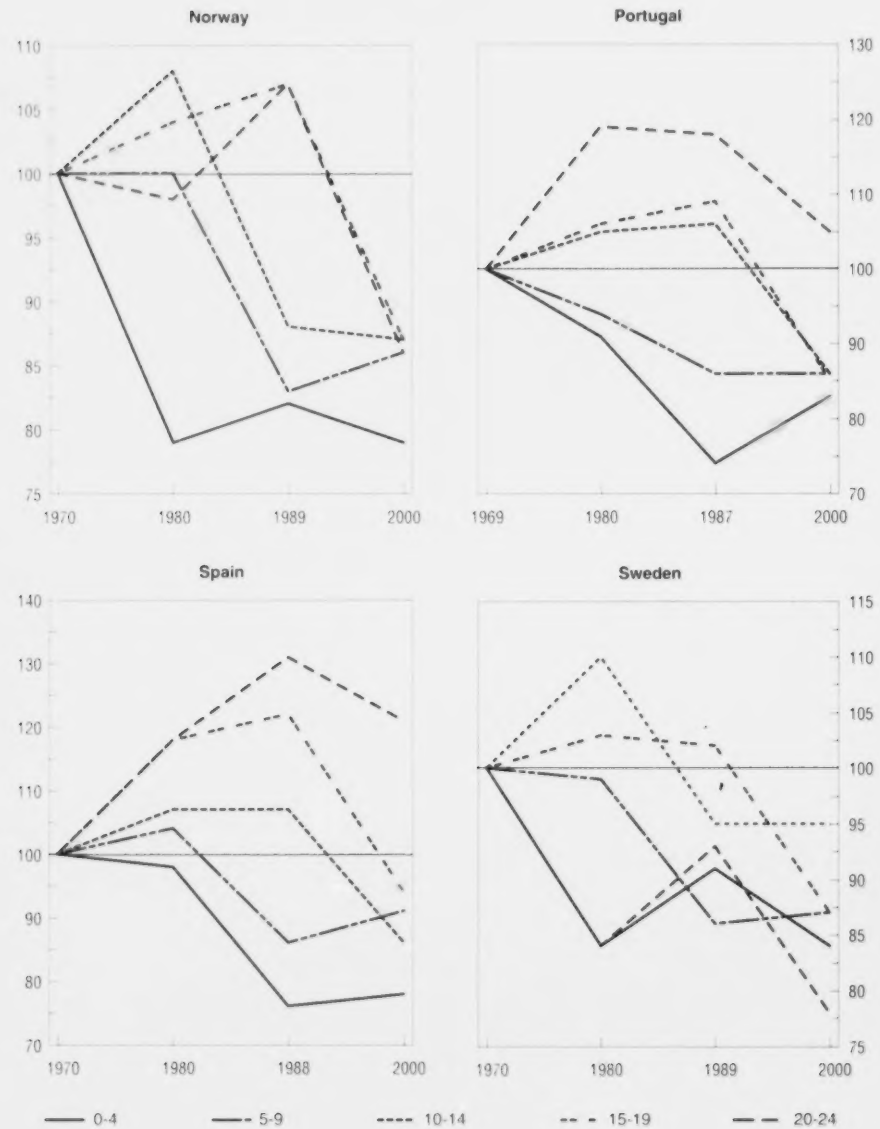
a) Projections for the year 2000 are based on OECD estimates.
Source: OECD demographic data bank.

Chart 1d. **The evolution of different age groups in the youth population: 1970 to 2000**[a]



a) Projections for the year 2000 are based on OECD estimates.
Source OECD demographic data bank.

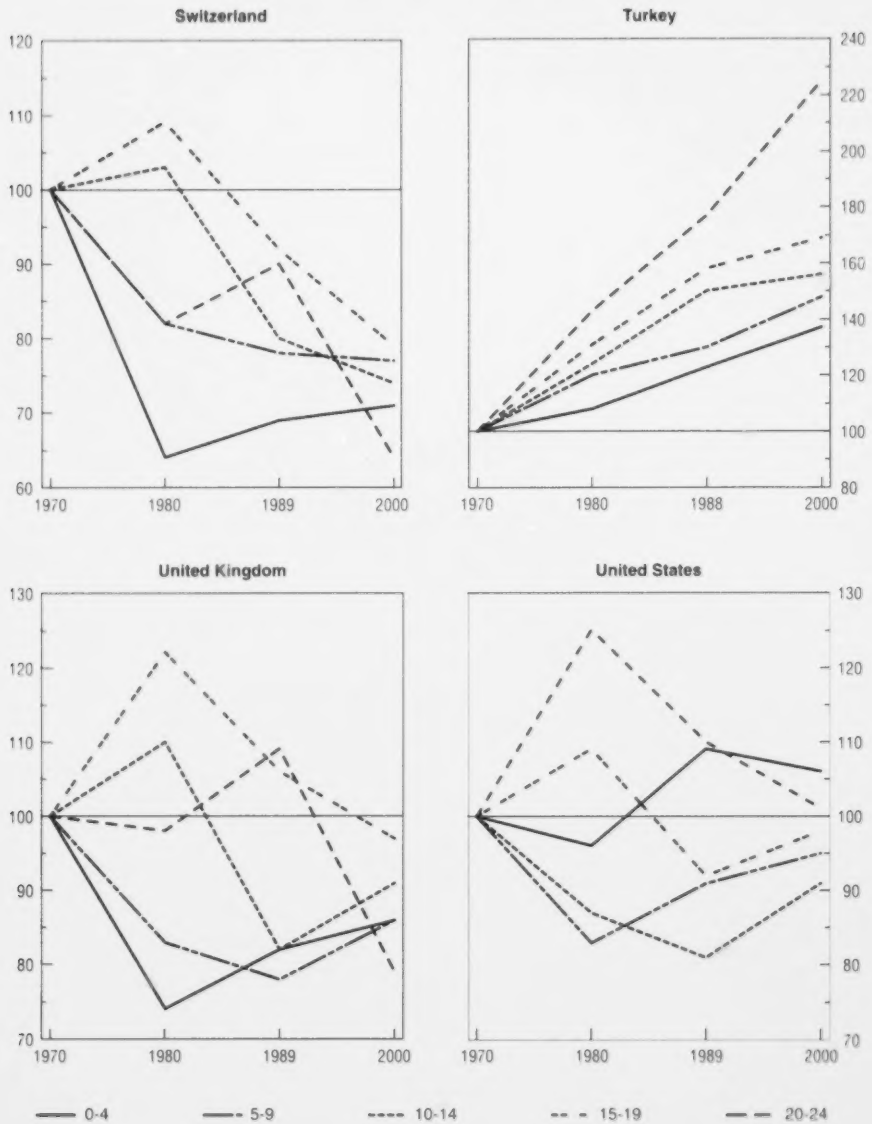
Chart 1e. **The evolution of different age groups in the youth population: 1970 to 2000**[a]



a) Projections for the year 2000 are based on OECD estimates.

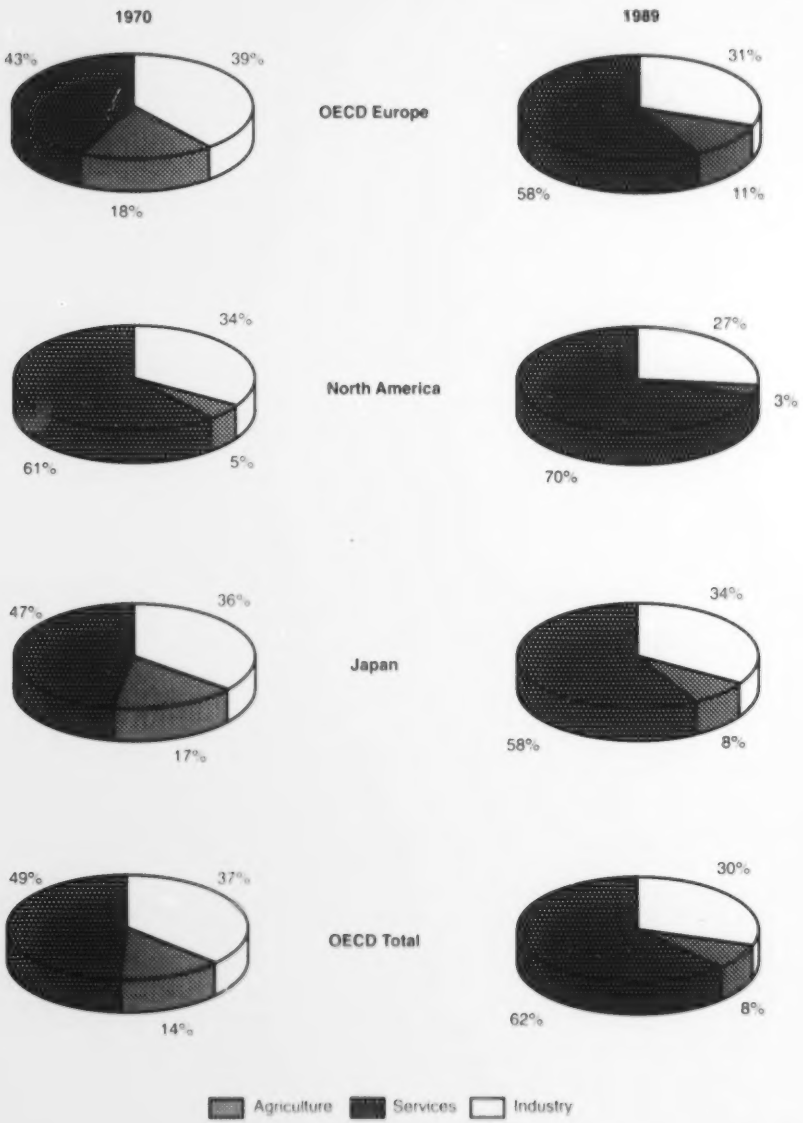
Source: OECD demographic data bank.

Chart 1f. **The evolution of different age groups in the youth population: 1970 to 2000[a]**



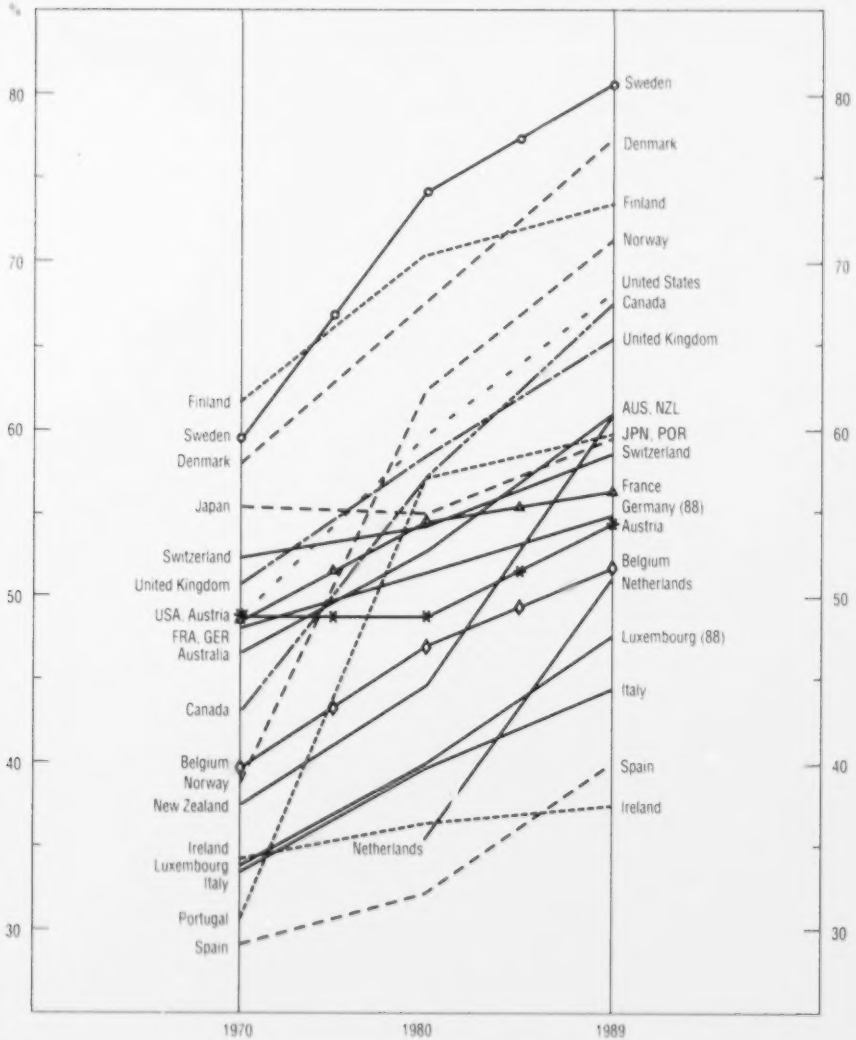
a) Projections for the year 2000 are based on OECD estimates.
Source: OECD demographic data bank.

Chart 2. **The structure of civilian employment : 1970 and 1989**



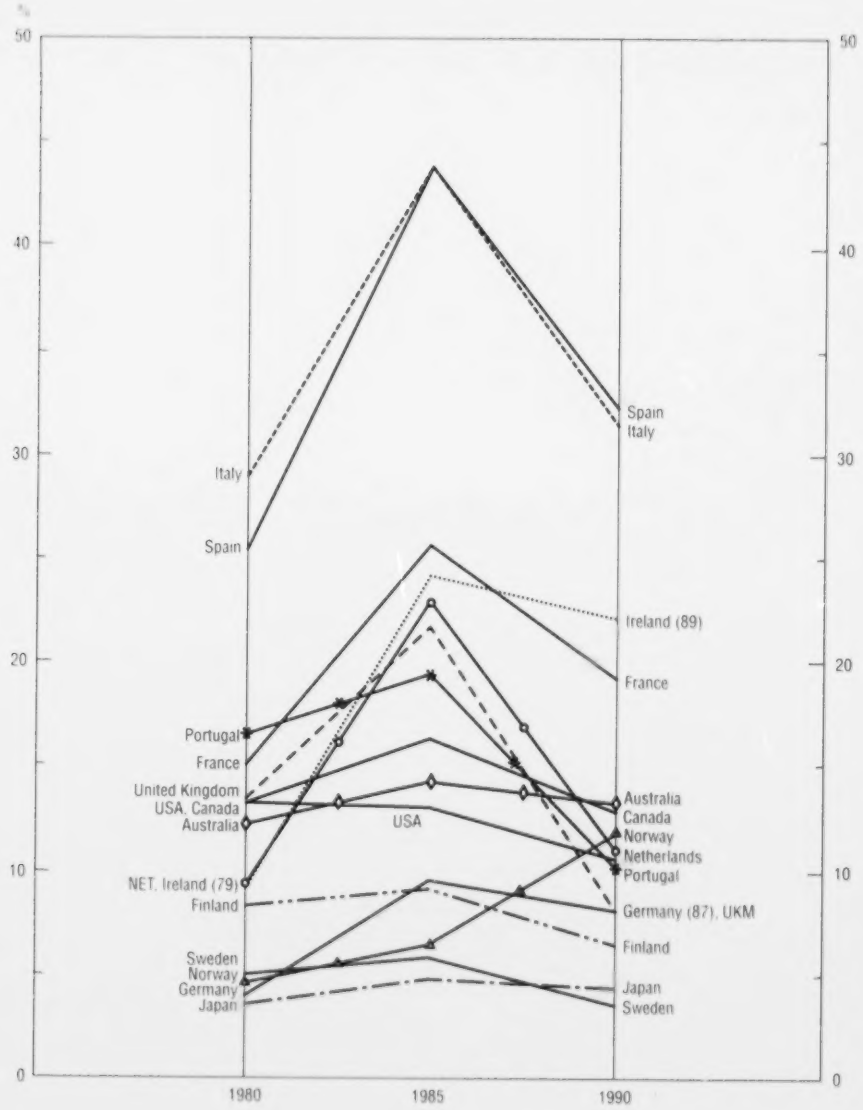
Source : OECD labour force statistics data bank

Chart 3. **Female labour force participation rates[a]: 1970, 1980, 1989**



a) Female labour force of all ages divided by the female population aged 15-64.
Source: OECD labour force data bank.

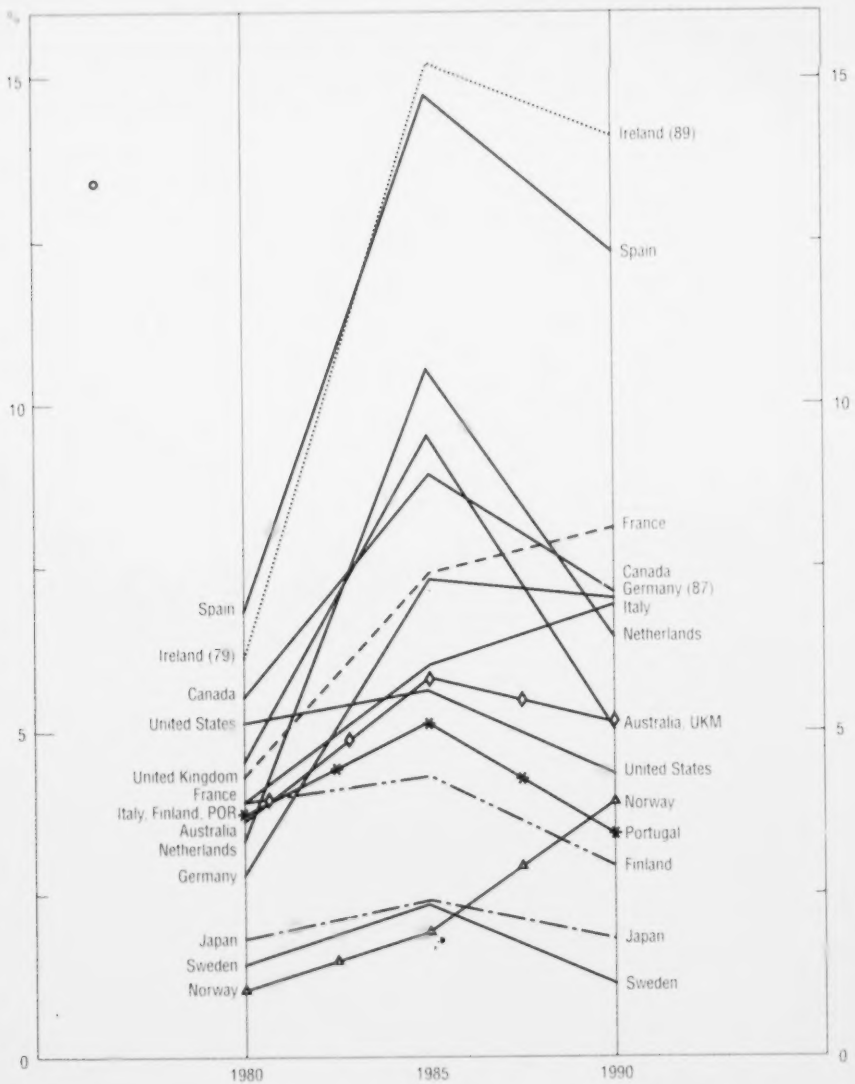
Chart 4.1. **Youth unemployment rates in the 1980s**[a]



a) The term "youth" refers to the 15-24 age group, with a few exceptions: the age group is 14-24 in Italy and 16-24 in Norway, Spain, Sweden, the United Kingdom and the United States. There are variations between countries concerning when in the year measurements are taken and whether armed service personnel are included.

Source: OECD labour force data bank.

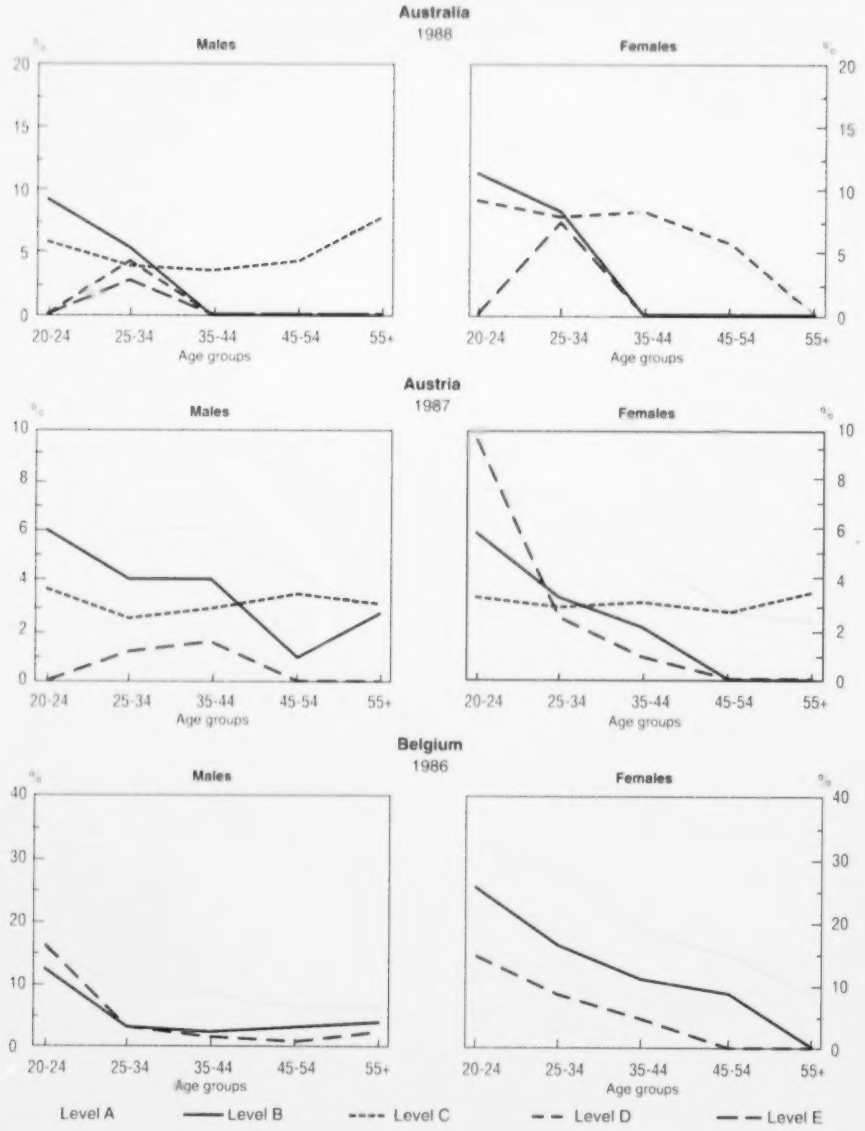
Chart 4.2. **Adult unemployment rates in the 1980s**[a]



a) The term "adult" refers to the 25-64 age group, with a few exceptions: the age group is 25 and over in Australia and Norway. There are variations between countries concerning when in the year measurements are taken and whether armed service personnel are included.

Source: OECD labour force data bank.

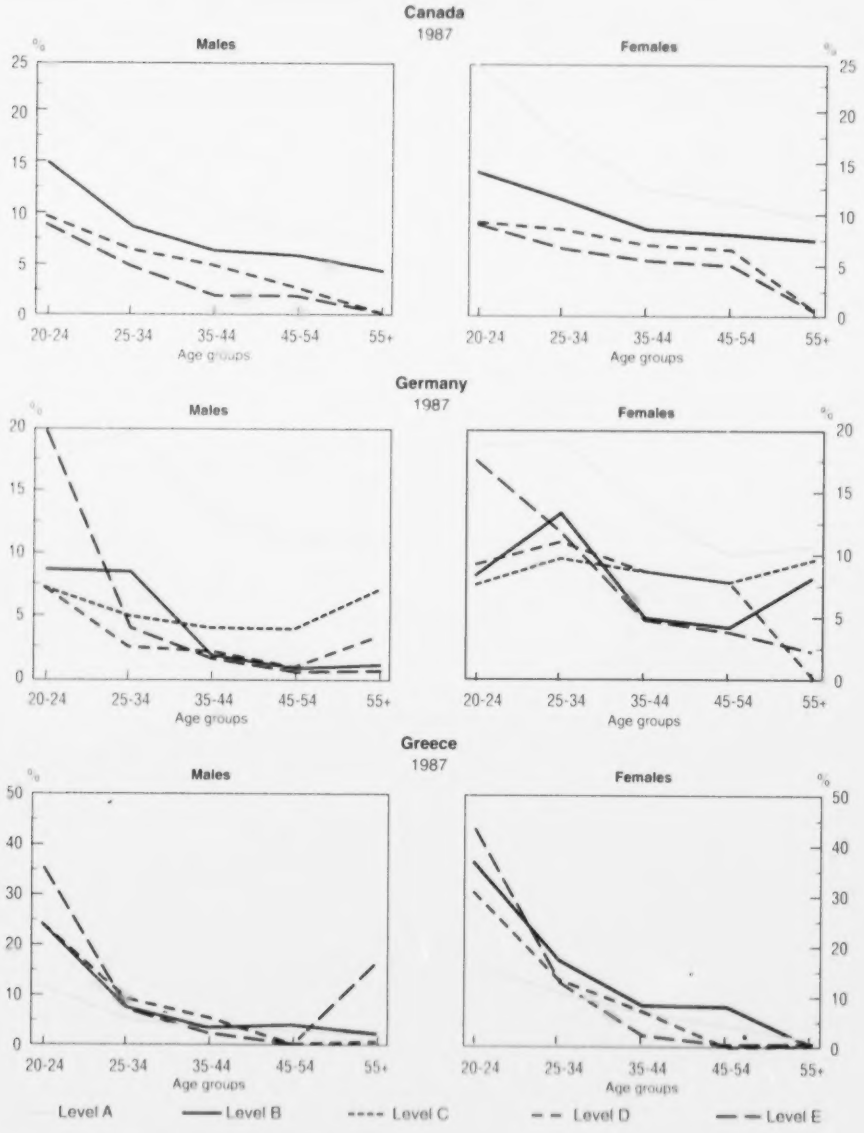
Chart 5a. **Unemployment by level of educational attainment, for different age groups, by sex**[a]



a) Charts are based on data from labour force sample surveys.
For further information on the classification of educational attainment in each country, see the Technical Note.

Source : *Employment Outlook : July 1989*, OECD, Paris, 1989.

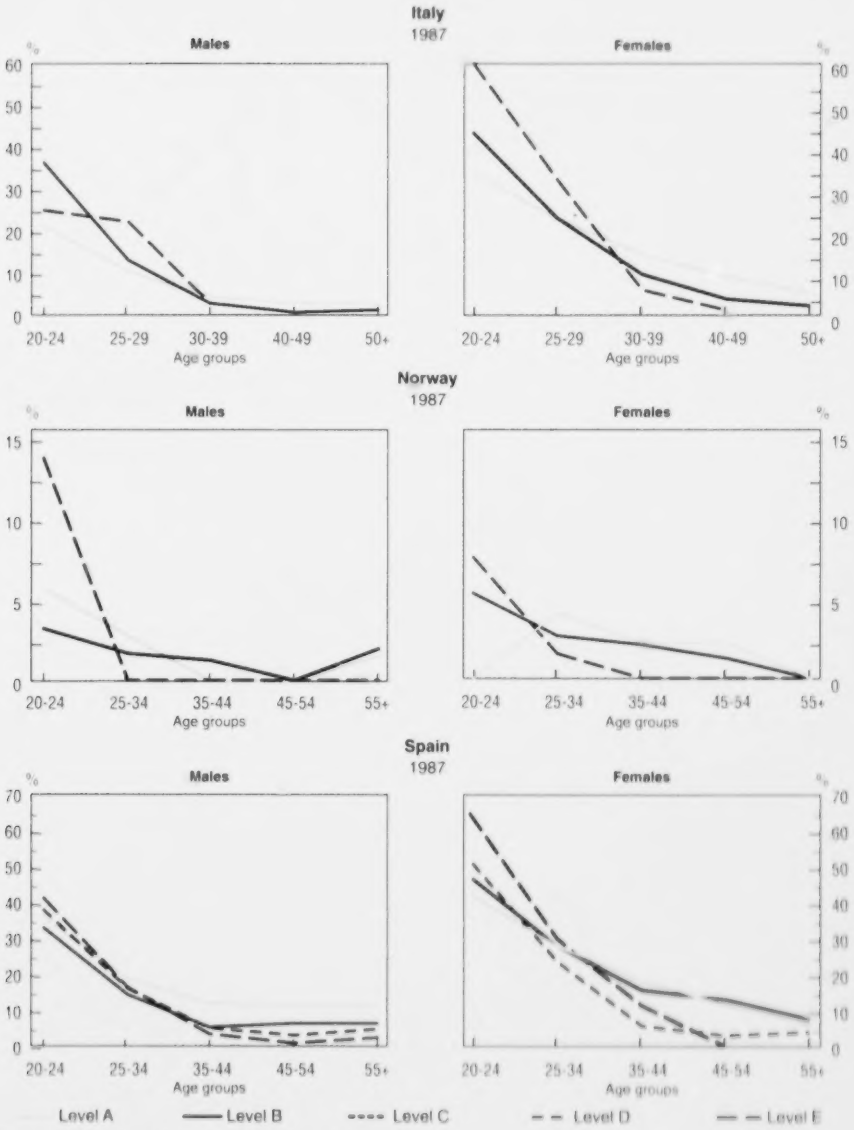
Chart 5b. **Unemployment by level of educational attainment, for different age groups, by sex**[a]



a) Charts are based on data from labour force sample surveys.
For further information on the classification of educational attainment in each country, see the Technical Note.

Source : *Employment Outlook July 1989*, OECD, Paris, 1989.

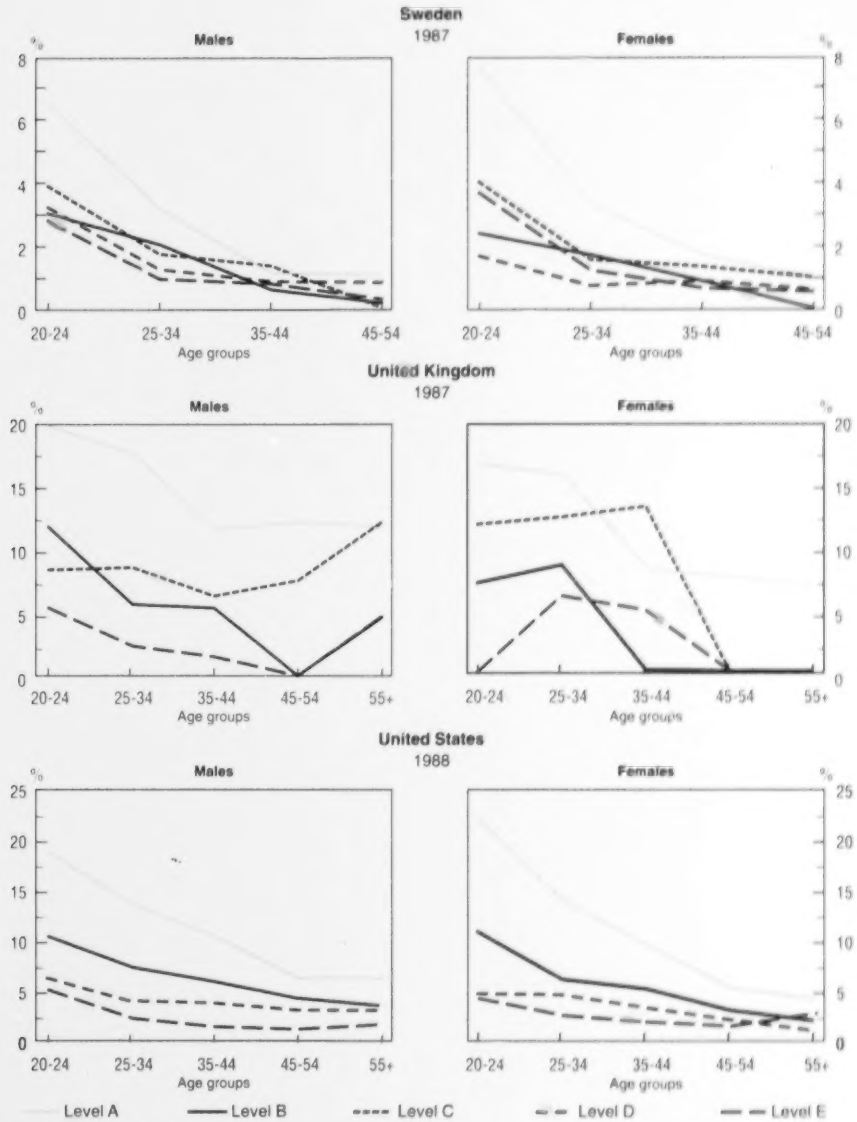
Chart 5c. **Unemployment by level of educational attainment, for different age groups, by sex**[a]



a) Charts are based on data from labour force sample surveys.
For further information on the classification of educational attainment in each country, see the Technical Note.

Source : *Employment Outlook : July 1989*, OECD, Paris, 1989.

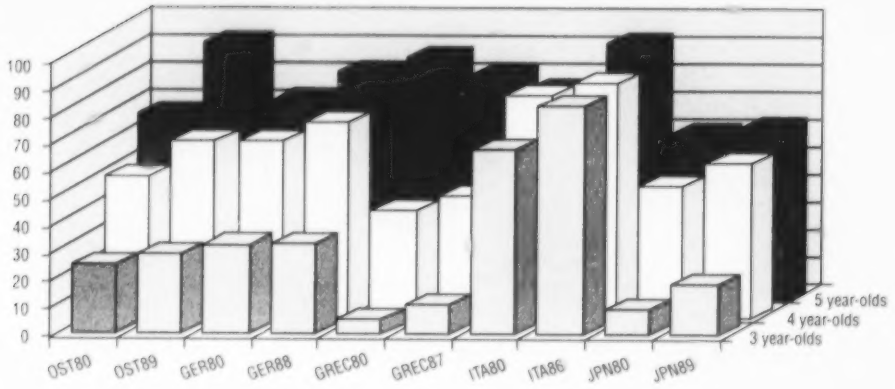
Chart 5d. **Unemployment by level of educational attainment, for different age groups, by sex**[a]



a) Charts are based on data from labour force sample surveys.
For further information on the classification of educational attainment in each country, see the Technical Note.

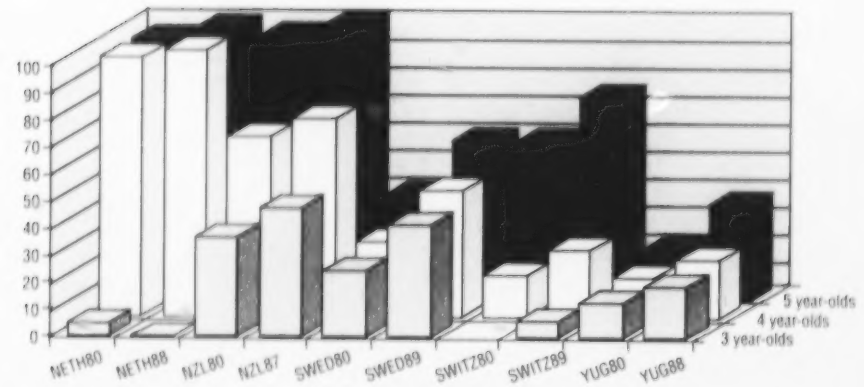
Source : Employment Outlook : July 1989, OECD, Paris, 1989.

Chart 6a. **Enrolment rates for 3, 4 and 5 year-olds in pre-primary and primary schooling : 1980 and most recent year available**



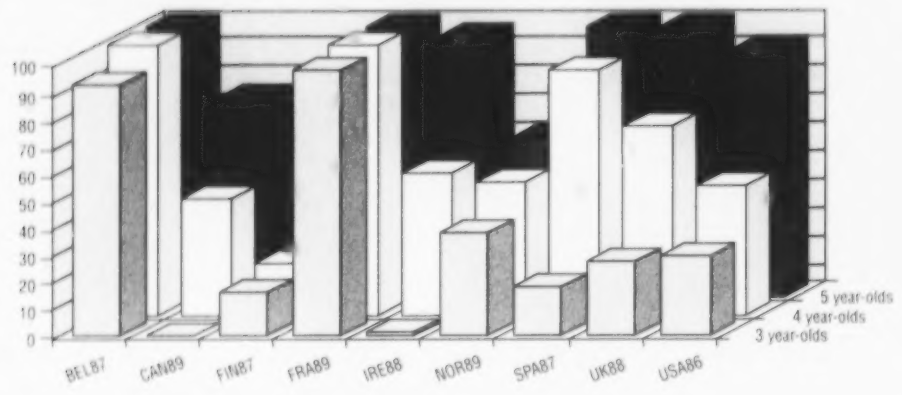
Source: OECD education data bank

Chart 6b. **Enrolment rates for 3, 4 and 5 year-olds in pre-primary and primary schooling: 1980 and most recent year available**



Source: OECD education data bank

Chart 6c. **Enrolment rates for 3, 4 and 5 year-olds in pre-primary and primary schooling: most recent year available**



Source: OECD education data bank

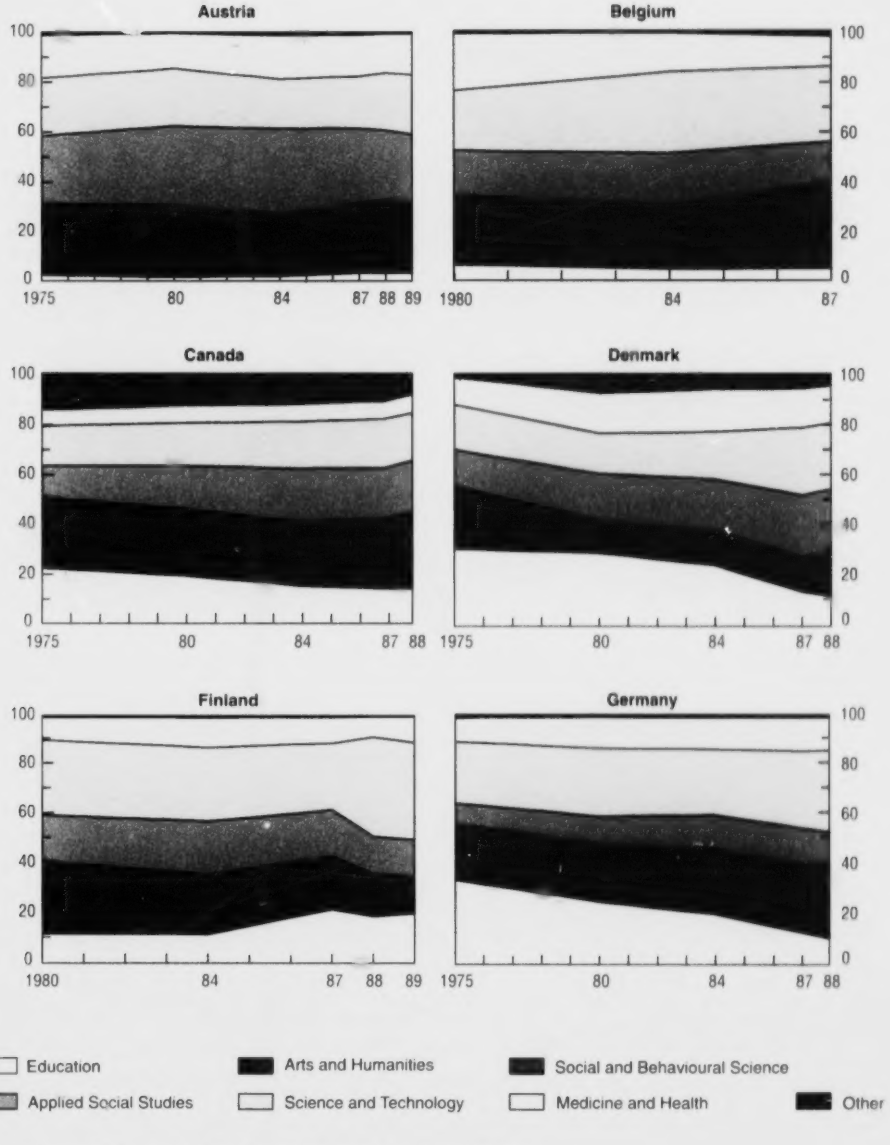
Table 2. **Enrolment rates in education at ages 17 and 21, 1988/89**

	Participation at age 17		Proportion of the relevant age group entering third level education	Participation at age 21	
	Total or (*) full-time only	Part-time		Total or (*) full-time only	Part-time
Australia	77.6	17.0	53.7	..	..
Austria	..	..	25.1[a]	14.4	..
Belgium[b]	92.9	4.6	49.3	31.3	7.4
Canada	77.2	0.1	..	27.9[c]	2.4
Denmark	77.1	..	47.7	29.6	..
Finland	90.6*[d]	..	55.6*[a]	13.0[a,c]	..
France[e]	85.6	9.5	46.0	27.6	0.3
Germany	80.1[c]	..	32.0	23.6[c]	0.1
Greece	55.2*[d,f]	..	32.8[d]	17.5[b,c]	..
Ireland	70.6	..	32.5*	13.3*[c]	..
Italy[g]	46.3	..	26.9	..	..
Japan[h,c]	90.4	1.6	36.7	..	..
Luxembourg[b,c]	83.4	15.8	..	7.2	1.5
Netherlands	88.2	10.7	36.0	33.0	7.6
New Zealand	56.1[b,f]	3.6[a,c]	40.2[b,c]	23.5[a]	11.1[a]
Norway[a]	83.9	1.7	..	31.5	4.8
Spain	55.9*[b,f]	..	38.4	20.6[c]	..
Sweden[a]	84.7*	..	49.6	13.9	..
Switzerland[a]	85.9	56.6	41.4	21.4	7.4
Turkey	35.0*	..	14.8*	6.5*[c]	..
United Kingdom[a]	55.7	18.6	37.4	18.4	7.6
United States[d]	89.0	0.4	..	29.8	5.1
Yugoslavia	66.3[d]	..	27.4	18.1[d]	2.2[d]

Note: The age of the reference population used to calculate the percentage of an age group entering third level education is the average of the ages at which the large majority of students complete their second level education and are thus in a position to enrol in third level education.

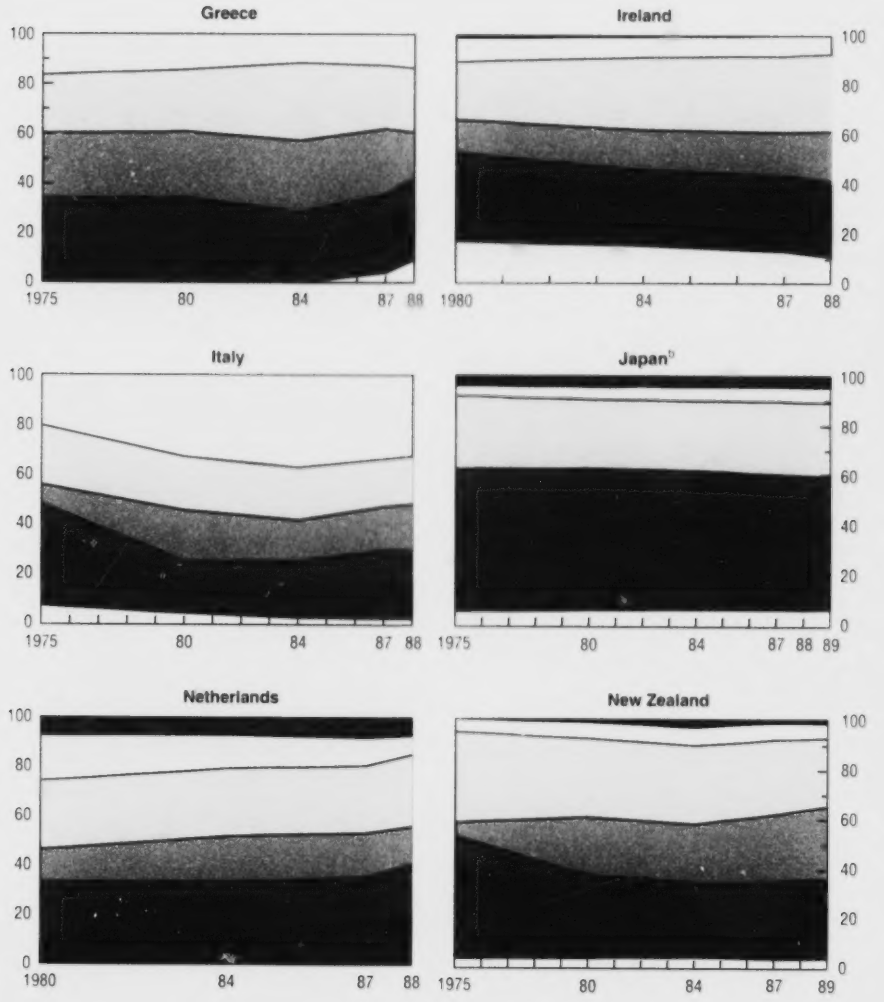
.. Data not available.
a) 1989/90.
b) 1987/88.
c) Third level only.
d) 1986/87.
e) Apprenticeship has been classified as full-time education.
f) Second level only.
g) Excluding Technical Correspondence Institutes and part-time new entrants in Polytechnics/Technical Institutes.
h) Does not include Private Further Education and Youth Training Schemes outside public Further Education Colleges.
Source: OECD education data bank.

Chart 7a. **Trends in graduation by field of study from university level education (ISCED levels 6 and 7): 1975-89**[a]



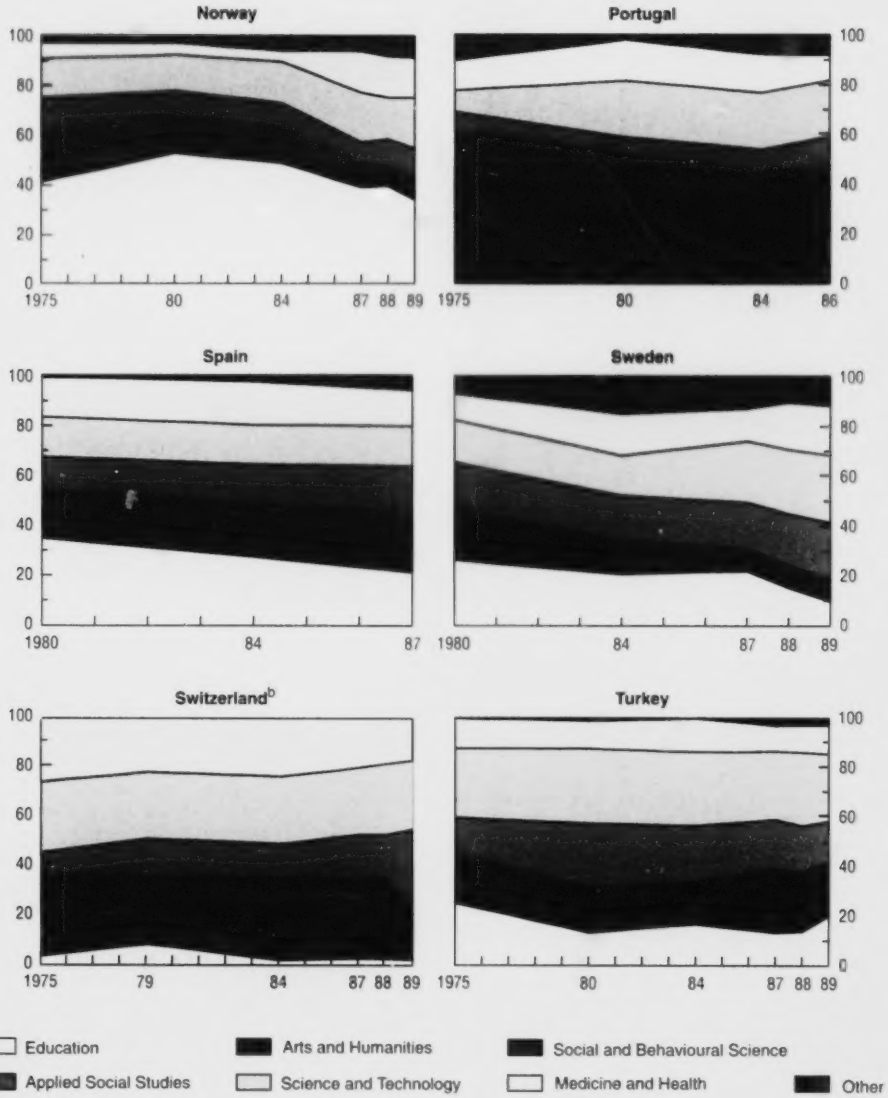
a) The aggregates for the fields of studies are given in the Technical Note.
Source: OECD education data bank.

Chart 7b. **Trends in graduation by field of study from university level education (ISCED levels 6 and 7): 1975-89**[a]



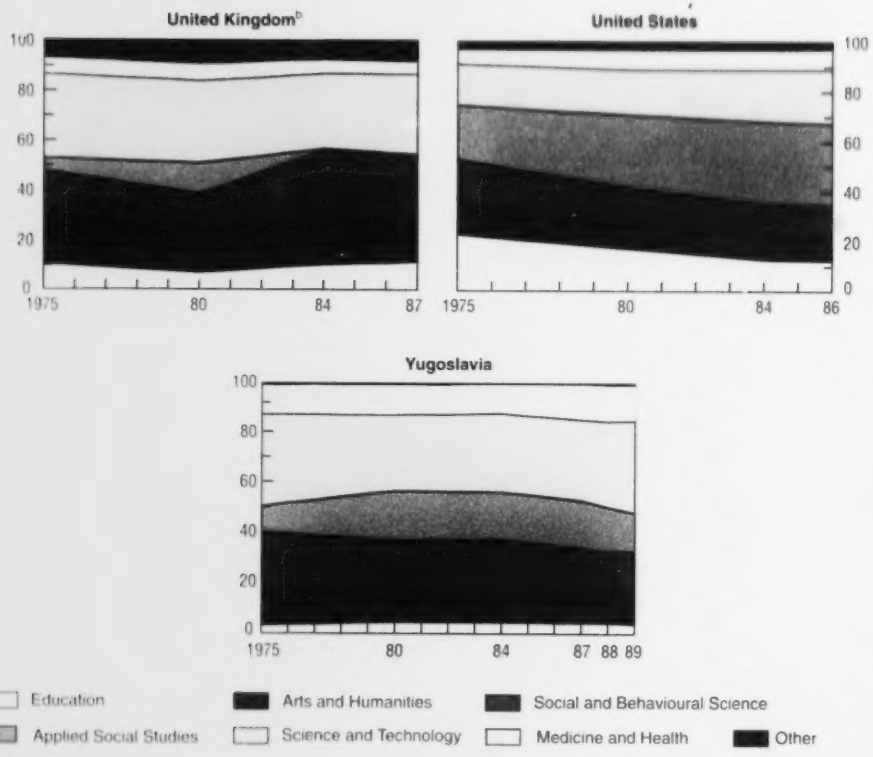
a) The aggregates for the fields of studies are given in the Technical Note.
b) Social and Behavioural Science has been merged with Applied Social Studies.
Source: OECD education data bank.

Chart 7c. **Trends in graduation by field of study from university level education (ISCED levels 6 and 7): 1975-89[a]**



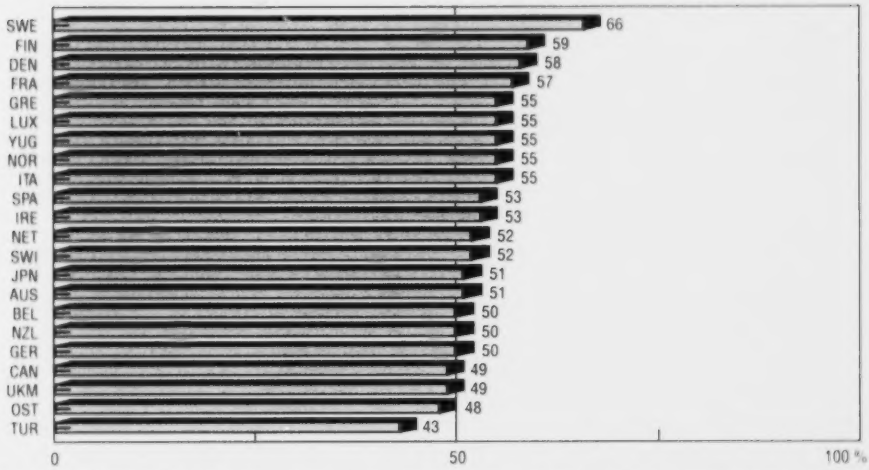
a) The aggregates for the fields of studies are given in the Technical Annex.
b) Social and Behavioural Science, and Applied Social Studies have been reclassified since 1988.
Source: OECD education data bank.

Chart 7d. **Trends in graduation by field of study from university level education (ISCED levels 6 and 7): 1975-89**[a]



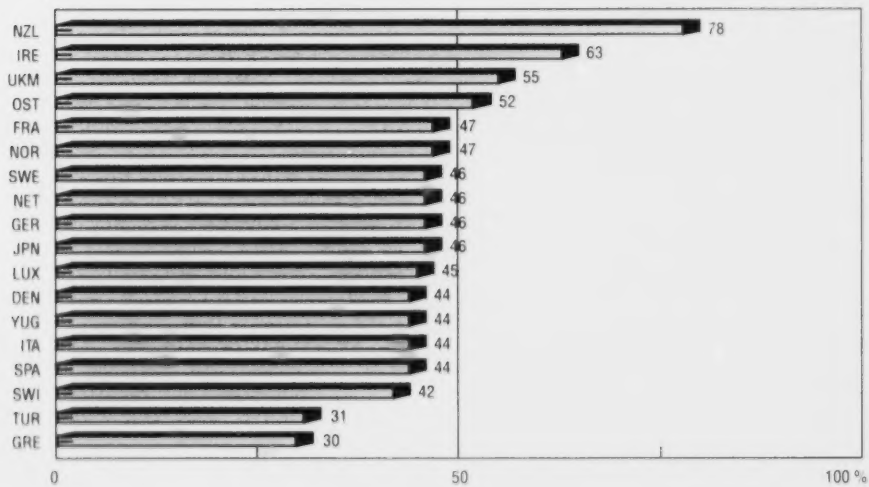
a) The aggregates for the fields of studies are given in the Technical Annex.
b) Social and Behavioural Science has been merged with Applied Social Studies since 1984.
Source: OECD education data bank.

Chart 8a. **Female participation rates in upper secondary general: 1989/90**[a]



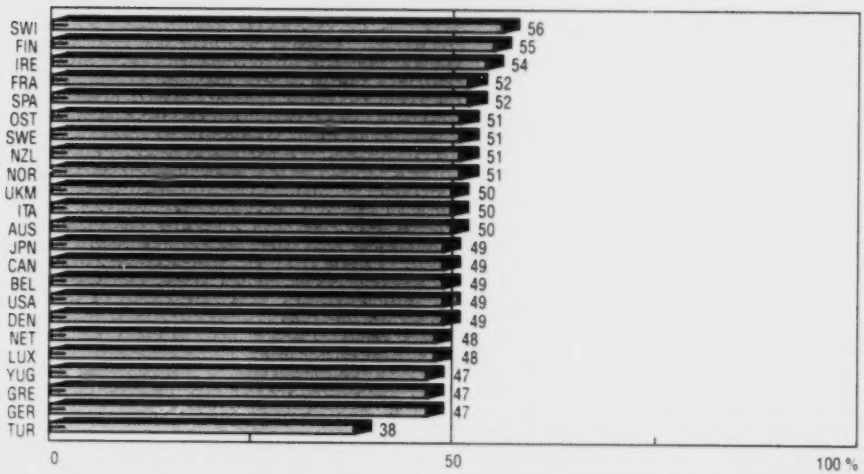
a) Data for DEN, IRE, NET AUS, GER and UKM are for 1988/89; GRE, LUX, SPA and BEL for 1987/88, YUG for 1986/87.

Chart 8b. **Female participation rates in upper secondary vocational/technical: 1989/90**[a]



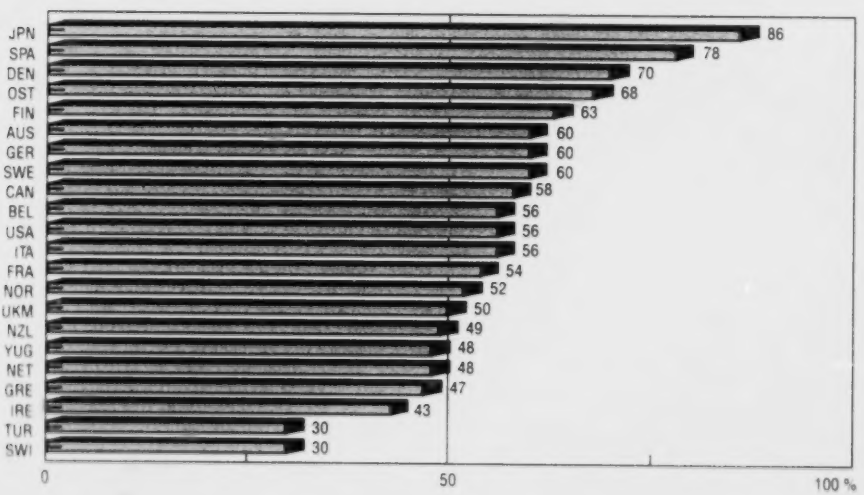
a) Data for IRE, UKM, NET GER and DEN are for 1988/89; GRE, LUX and SPA for 1987/88; YUG for 1986/87.
Source: OECD education data bank.

Chart 8c. **Female participation rates in total upper secondary: 1989/90**[a]



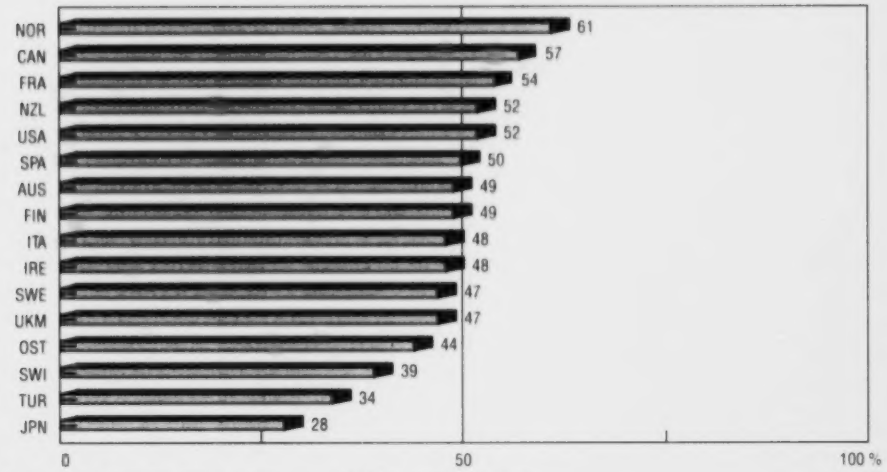
a) Data for SWI, FIN, IRE, AUS, DEN and GER are for 1988/89; SPA, UKM, BEL, LUX and GRE for 1987/88; USA for 1986/87.

Chart 8d. **Female participation rates in level 5: 1989/90**[a]



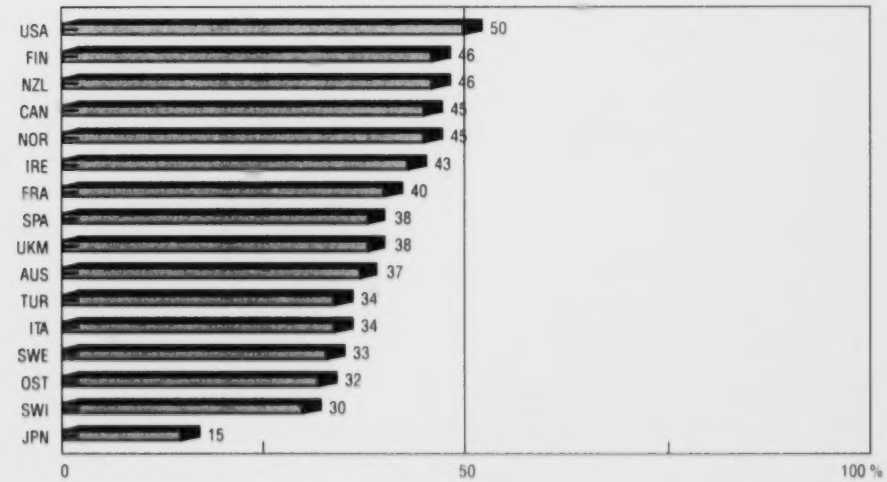
a) Data for SPA, DEN, AUS, GER, ITA, UKM, NET and IRE are for 1988/89; BEL and GRE for 1987/88; USA for 1986/87.
Source: OECD education data bank.

Chart 8e. **Female participation rates in level 6: 1989/90[a]**



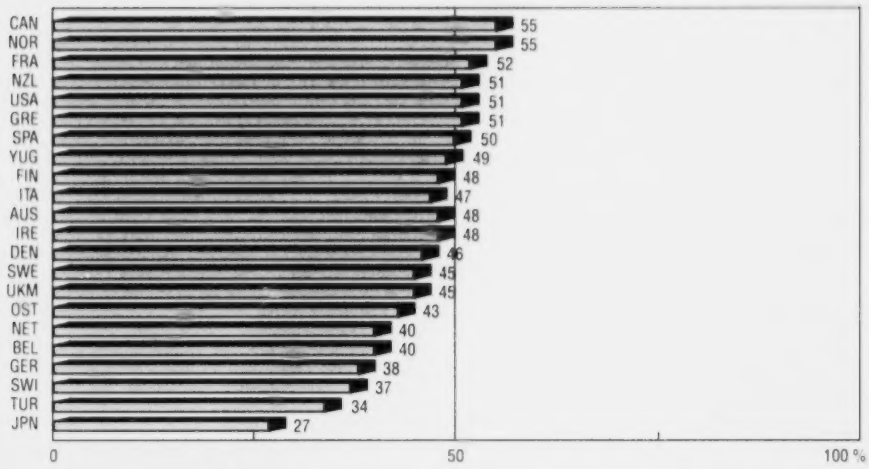
a) Data for SPA, AUS, ITA, IRE and UKM are for 1988/89; USA for 1986/87.

Chart 8f. **Female participation rates in level 7: 1989/90[a]**



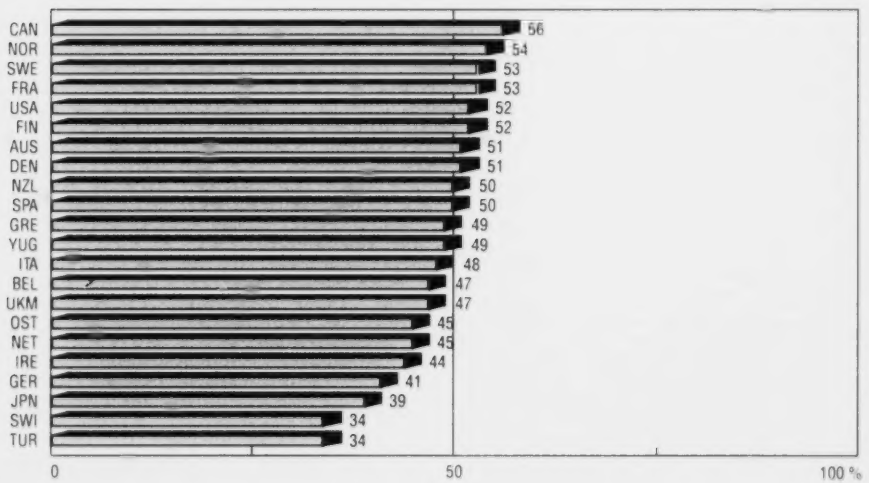
a) Data for IRE, SPA, UKM, AUS and ITA are for 1988/89; USA for 1986/87.
Source: OECD education data bank.

Chart 8g. **Female participation rates in levels 6 and 7: 1989/90**[a]



a) Data for SPA, ITA, AUS, IRE, DEN, UKM and NET are for 1988/89; GRE and BEL for 1987/88; USA for 1986/87.

Chart 8h. **Female participation rates in total third level: 1989/90**[a]



a) Data for AUS, DEN, SPA, ITA, UKM, NET, IRE and GER are for 1988/89; GRE and BEL for 1987/88; USA for 1986/87.
Source: OECD education data bank.

Table 3. **Percentage of women teachers in different levels of education, 1988/89**

	Pre-primary	Primary (first level)	Second level/ first stage	Second level/ second stage general	Second level/ second stage vocational/ technical	Special
Australia[c]	..	71.7	48.3[b]	..	..	75.6
Austria[c]	99.6	81.3	60.3	53.5	49.6	..
Belgium[d]	..	74.7	52.8[b]	..	..	60.7
Canada[c]	..	68.8	53.2	53.9	..	..
Denmark[e]	96.0	59.0	59.0	37.0	..	..
France[f]	95.6[c]	70.6[c]	62.5[c]	50.0	43.3	..
Germany	85.3	78.4	46.1	34.8	30.9	63.1
Greece[g]	100.0	49.3	62.2	47.6	34.9	58.9
Ireland	76.3	76.3	..	50.6[i,b]	17.2[i,b]	76.1
Italy[c]	..	89.9	69.9	63.5	50.7	..
Japan[c]	88.7	57.7	36.1	23.9	3.4	51.6
Luxembourg[c]	..	50.3	29.1[b]	..	..	..
Netherlands	63.5[c]	..	..	28.2	29.2	50.1
New Zealand[h]	98.9	73.1	54.8	43.4	..	84.2
Norway	96.4[d]	62.3[c,j]	..	35.0[j]	..	67.6
Portugal[c,d]	98.7	83.1	64.6[b]	..	..	..
Spain[d]	93.5	73.1	48.2	50.9	38.5	69.2
Sweden[c]	94.6[a]	68.5[k]	..	44.3[j]	..	77.9
Turkey[c]	99.7[m]	42.2	34.3	41.5	44.4	34.1
United Kingdom	100.0	77.8	52.5	52.3	43.6	69.0[d]
Yugoslavia	94.9[c]	71.7[c]	54.8[c]	48.3[d]	11.4[d]	73.5[c]

.. Data not available.
a) Full-time equivalents.
b) Lower and upper secondary, general and vocational technical.
c) 1989/90.
d) 1987/88.
e) Data supplied by national authorities.
f) Public sector only.
g) 1986/87.
h) Full-time teachers only.
i) Pre-primary and primary.
j) Includes headmasters and inspectors.
k) Primary and lower secondary.
l) General and vocational technical.
m) Excludes teachers for the nursery classes within primary schools.
Source: OECD education data bank.

Table 4. **The age distribution of teachers: Percentages over 45 or 40 years of age**[a]

		Level	45 years and above
Canada	(1988/89)	Primary and secondary	34.5
Denmark	(1989/90)	Primary and lower secondary (comprehensive)	44
		Upper secondary	43
Finland	(1989)	Primary and lower secondary (comprehensive)	52
		Upper secondary general	65
		Vocational	32
France	(1988/89)	Primary (public)	29.9
		Secondary (public)	31.8
Germany	(1989)	Primary and secondary general	43.1
		Vocational	39.4
Greece	(1986/87)	Primary	27.2
		Secondary	17.7
Ireland	(1987)	Primary	28.9
		Secondary	27.9
		Vocational	29.2
Japan	(1989)	Primary	39.5
		Lower secondary	39.2
		Upper secondary	41.0
Luxembourg	(1988)	Primary	32.1
		Secondary	12.9
Netherlands	(1990)	Primary	20.0
		Secondary	31.6
		Vocational[b]	38.0
New Zealand	(1990)	Primary	40.7
		Secondary	34.6
Portugal	(1986/87)	Primary and secondary	24.7
Spain	(1989/90)	Primary and lower secondary (public)	54.0
		Upper gen. & voc. secondary (public)	23.0
United Kingdom	(1986/87)	Primary and pre-primary	38.2
		Secondary	28.1
United States	(1990)	Primary and secondary	27
			40 years and above
Australia	(1989)*	Primary and secondary	36.8
Austria	(1988/89)	Compulsory school	28.0
		Upper secondary general	34.8
		Vocational school[b]	52.7
Canada	(1988/89)	Primary and secondary *	59.6
Norway	(1988)	Primary and lower secondary	42
		Upper secondary	67
Sweden	(1989)	Primary and lower secondary	71
		Upper secondary	82
Switzerland	(1989/90)	Primary	35.7
		Lower secondary	49.2

* 41 and over.
a) Depending on the age classifications adopted by countries.
b) 1987.
Source: National sources.

Table 5. **Educational expenditure, 1989**

In local currency and at current prices

	Educational spending as a percentage of GDP			Capital expenditure as a % of total public educational expenditure
	Public sources	Private sources	Total	
Australia[a]	5.25	0.38	5.63	8.73
Austria	5.48	..	5.48	6.98
Belgium[b,c]	4.94	..	4.94	0.78
Canada	6.23	0.61	6.84	7.01
Denmark	6.96	0.31	7.27	3.17
Finland[d]	5.31	0.49	5.80	6.54
France	5.31	1.03	6.34	7.06
Germany[b]	4.08	0.17	4.25	7.63
Greece[d]	2.68	0.23	2.91	5.97
Ireland[d]	5.85	0.28	6.13	8.00
Italy[a]	4.96	..	4.96	8.95
Japan	4.70[b]	1.44[b]	6.14[b]	14.75[e]
Luxembourg	5.92	..	5.92	17.86
Netherlands[b]	6.54	0.27	6.81	4.45
New Zealand[b]	5.62	..	5.62	9.22
Norway	7.18	0.21	7.39	5.35
Portugal	4.80	..	4.80	8.43
Spain	4.26	1.07	5.33	12.57
Sweden	7.13	..	7.13	3.93
Switzerland	5.02	..	5.02	10.92
Turkey	1.78[b]	..	1.78[b]	18.50
United Kingdom	4.97[d]	..	..	3.94[b]
United States[a]	4.77	1.68	6.44	6.93
Yugoslavia	3.83	..	3.83	3.81

.. Data not available.

a) 1986.

b) 1988.

c) Expenditure of the Ministries of Education only.

d) 1987.

e) 1987: public and private expenditure for regular public education.

Sources: OECD education and national accounts data banks.

Table 6. **Public expenditure, 1989**

	Public expenditure on education as a % of public expenditure	Total public expenditure as a % of GDP
Australia[a]	13.6	38.7
Austria	11.0	49.6
Belgium[b,c]	8.6	57.7
Canada	15.4	44.3
Denmark	12.2	58.7
Finland[d]	13.7	42.2
France	10.8	49.5
Germany[b]	9.1	46.6
Greece[d]	7.3	36.5
Ireland[d]	11.0	53.4
Italy[a]	9.7	50.9
Japan[b]	14.6	32.2
Luxembourg[a]	6.5	51.7
Netherlands[a]	11.7	58.3
Norway	13.5	54.6
Portugal	11.5	41.7
Sweden	11.9	60.1
Switzerland	14.8	34.1
United Kingdom[b]	11.5	41.1
United States[a]	12.9	37.0

a) 1986.
b) 1988.
c) Expenditure of the Ministries of Education only.
d) 1987.
Sources: OECD education and national accounts data banks.

Table 7. **Annual average growth rate of real public educational expenditure per pupil/student by level: 1975-80, 1980-88**

	Primary		Secondary		Higher		Total[a]	
	1975-80	1980-88	1975-80	1980-88	1975-80	1980-88	1975-80	1980-88
Australia[b]	..	..	1.1	1.1	–3.4	–0.4	0.1	1.5
Austria	1.2	2.7	3.1	2.1	–6.2	1.1	2.4	2.3
Belgium[b]	6.2	1.4	..	..	–1.0	–3.5	..	..
Canada	..	..	4.2	1.4	–0.7	–0.6	3.5	1.6
Denmark[b]	–2.2	1.6	1.9	–0.3	–2.2	–2.6	–1.7	–1.0
Finland	..	2.0	..	4.5	..	0.1	..	2.9
France	0.5	3.0	1.2	2.2	–2.2	0.5	1.2	2.4
Germany	4.9	1.3	0.4	2.6	–5.5	–4.6	1.3	1.4
Greece	2.6	2.0	4.2	1.6	–0.5	1.4	2.4	1.4
Ireland[b]	2.5	3.6	4.1	0.2	0.2	–2.0	3.1	0.9
Italy[c]	5.0	1.7	4.1	–2.1	–5.1	11.1	3.1	5.0
Japan	2.3	1.2	3.2	–0.6	4.7	1.4	5.2	0.5
Netherlands[b]	1.8	1.2	–1.8	2.0	–2.4	0.4	2.0	2.3
New Zealand[b]	0.7	2.2	1.4	5.2	–2.3	–8.1	0.2	0.8
Norway	1.9	2.7	2.3	2.7	–10.2	1.3	–0.2	2.9
Portugal[c]	7.2	2.2	6.2	1.9	8.0	4.9	6.1	2.3
Sweden[d]	..	..	1.5	1.1	–6.2	0.9	3.1	–1.1
Switzerland	..	..	0.4	3.5	0.4	–1.4	3.0	2.7
United Kingdom[b]	2.4	1.1	–0.8	0.1	–2.3	–5.5	–0.6	–0.8
United States[b]	1.5	3.3	0.9	3.1	–0.9	2.2	1.2	3.0

.. Data not available.

a) "Total" can cover other costs and expenditures not included elsewhere in the table.

b) 1980-1988 only extends to 1987.

c) 1980-1988 only extends to 1986.

d) Current expenditure only is included for each level; capital expenditure is included in the aggregate totals.

Note: Countries for which the primary level includes pre-primary are: Belgium, Greece, Ireland, the Netherlands, Norway and the United States. Countries for which the secondary level includes primary are: Australia, Canada, Sweden and Switzerland.

Source: OECD education data bank.

Table 8. **Incidence of training among employees by age as measured by *i)* labour force-type surveys; *ii)* enterprise-based or administrative data: 1989**

i) Labour force-type surveys

	Australia		Finland (1987)	France		Germany		Ireland	Spain (1990)	Sweden (1987)	Great Britain	United States (1983)	
	All	In-house courses		All	Excluding apprentices	All	Excluding apprentices					All	Formal company programme
All persons	79.0	34.9	34.4	4.6	3.5	12.7	5.3	7.8	2.4	25.4	14.4	35.8	11.8
15-19 years	92.6	30.3	16.1	43.2	10.2	75.9	8.8	28.0	5.8	20.0	23.0	18.1	1.9
20-24				9.2	8.2	19.8	7.1	13.6	5.4		19.0	28.6	7.6
25-34	83.2	39.6	34.3	4.6	4.5	8.0	7.1	6.2	3.3	26.9	17.0	40.2	13.8
35-44	77.1	40.2	42.4	2.3	2.3	4.0	3.8	4.0	1.4	29.1	15.0	42.2	15.2
45-49	64.6	31.5	38.1	1.5	1.5	2.4	2.0	2.6	0.1	27.5	12.0	38.0	13.5
50 years +	49.0	20.4	27.6	0.6	0.6	..	..	1.7	0.01	18.2	7.2	29.5	9.1

ii) Enterprise-based or administrative data

	Japan		Netherlands (1986)	Norway
	Any training	Within last two years		
All persons	75.3	36.7	25.0	33.1
16-24 years	73.1	33.6	..	25.1
25-34	78.7	41.6	..	36.4
35-44			..	35.9
45-54	74.7	35.1	..	35.6
55-67	66.5	19.1	..	24.6

.. Data not available.

Note to i: The incidence of training is calculated as the number of employed persons within the framework and coverage of each country's survey, who said they had received some kind of training during the reference period, divided by the total number counted as employed. Age groups for Australia and Finland refer to 15-24, 25-34, 35-44, 45-54, and 55-64. For Spain they refer to 16-19, 20-24, 25-34, 35-44, 45-49, and 50 and over. For Sweden they refer to 16-25, 26-35, 36-45, 46-55 and 56-64. For Great Britain they refer to 16-19, 20-24, 25-29, 30-39, 40-49, 50-64 (men) and 50-59 (women). Age groups for the United States refer to 16-19, 20-24, 25-34, 35-44, 45-54, and 55 and over.

Note to ii: The companies included in terms of minimum number of employees vary across the countries in the table (Japan: 30 or more regular employees; Netherlands: 5 or more; Norway: more than 2 employees).

General note: For the detailed coverage and caveats for each country data, see *OECD Employment Outlook* 1991 Edition, chapter 5, "Enterprise-Related Training" especially the explanatory annex to the chapter.

Source: The incidence OECD (1991), Employment Outlook 1991, Paris, Tables 5.1*a* and *b*.

Table 9. **Public expenditure on special youth and adult labour market training programmes as a percentage of GDP: 1985 and 1990**

	Youth		Adult	
	1985	1990	1985	1990
Australia	0.07	0.04	0.02	0.06
Austria	0.03	0.01	0.09	0.10
Belgium	–	0.01[a]	0.11	0.14[a]
Canada	0.03	0.02	0.37	0.27
Denmark	0.23[b]	0.26[a]	0.49[b]	0.75
Finland	0.05	0.05	0.27	0.25
France	0.17	0.20[a]	0.25	0.32[a]
Germany	0.05	0.04	0.20	0.38
Greece	0.03	0.04	0.03	0.18
Ireland	0.51	0.39	0.66	0.49
Italy	0.32	0.69[c]	0.06	0.03[c]
Japan	..	..	..	0.03
Luxembourg	0.11	0.12	–	0.02
Netherlands	0.04	0.06	0.19	0.19
New Zealand	0.01	0.08[a]	0.09	0.43[a]
Norway	0.05	0.12	0.11	0.35
Portugal	0.04[b]	0.12	0.21[b]	0.14
Spain	–	0.08[a]	0.02	0.10[a]
Sweden	0.21	0.05	0.50	0.47
Switzerland	–	–	0.01	0.01
Turkey	0.04[b]	0.05[a]	0.02[b]	0.04[a]
United Kingdom	0.25	0.18	0.09	0.22
United States	0.04	0.03	0.12	0.09

– Nil or less than 0.005 per cent of GDP.
.. Data not available.
a) 1989.
b) 1986.
c) 1988.
Source: OECD (1991), *Employment Outlook 1991*, Paris. Note B, pp. 237-249.

TECHNICAL NOTE

General note on ISCED classification

In accordance with the International Standard Classification of Education (ISCED) adopted by the General Conference of UNESCO at its twentieth session (Paris, 1978), education is classified by level as follows:

Education preceding the first level (ISCED level 0), provides education for children who are not old enough to enter school at the first level.

Education at the first level (ISCED level 1): its main function is to provide the basic elements of education.

Education at the second level (ISCED levels 2 and 3), is based upon at least four years previous instruction at the first level, and provides general or specialised instruction, or both.

Education at the third level (ISCED levels 5, 6 and 7), requires as a minimum condition of admission the successful completion of education at the second level, or evidence of the attainment of an equivalent level of knowledge.

Special education covers all types of education for children who suffer from mental, physical, visual, social, hearing or speech handicaps, or from reading and writing difficulties.

Chart 5

a) Educational attainment is classified on the basis of data submitted by national authorities.

b) Classification of level of educational attainment in national education systems:
- *Level A:* having completed less than upper secondary education.
- *Level B:* having completed upper secondary education.
- *Level C:* vocational, non-academic educational training.
- *Level D:* having completed some post-secondary education, but not a university degree.
- *Level E:* having completed at least one university degree.

Chart 7

The fields of study are grouped in accordance with the International Standard Classification of Education (ISCED):

Education: "Education, Science, and Teacher Training".

Arts and Humanities: "Humanities, Religion, Theology" and "Fine and Applied Arts".

Social and Behavioural Science: "Social and Behavioural Science".

Applied Social Studies: "Commercial and Business Administration", "Mass Communication, Documentation", "Service Trades", "Law", "Architecture and Town planning" and "Transports and Communications".

Science and Technology: ''Natural Science'', ''Mathematics and Computer Science'', ''Engineering'', ''Trade, Craft and Industrial Programmes'' and ''Agriculture, Forestry and Fishing''.

Medicine and Health: ''Medical Science and Health-Related''.

Other: ''Home Economics'' and ''Other and Not Specified''.

Annex I

JOINT TUAC-BIAC STATEMENT ON EDUCATION AND TRAINING[1]

The two sides of industry meet and co-operate in many situations in everyday working life: improving production, settling disputes, drawing up agreements, planning. Organisations of the social partners also often co-operate, although national practices vary considerably.

At the international level, the advisory committees of Business and Industry and Trade Union organisations, respectively, take part in the deliberations of the OECD. These committees – the BIAC and the TUAC – in 1986 prepared a joint statement which was presented to the OECD Ministerial Council on how we perceive the interdependence existing between economic growth and development and full employment and social dignity[2]. In 1988, BIAC and TUAC presented a joint statement to the OECD Intergovernmental Conference on Education and the Economy in a Changing Society[3].

It has now become "conventional wisdom" that educational and training investment in "human resources" is a key to economic success. However, our experience in the world of work convinces us that much is still left to be desired in the performance of education and training systems, in the level and scope of investment in the skills and quality of the adult labour force, in the levels of functional competence reached and maintained – and thus in the prerequisites to sustained economic growth through the critical decade of the 1990s.

It is in the common interest of both BIAC and TUAC to again present a Joint Statement addressed to the OECD governments, this time focusing on the vital importance of education and training. A "total quality" approach is essential for education and vocational training. We can no longer accept complacency with systems which produce large numbers of drop-outs. 80-85 per cent of the labour force in the year 2000 is already at work and we much achieve the continuous development of adults' skills and competence throughout each individual's life.

Challenges facing the OECD countries

The OECD Member States must sustain their economies as they move towards, and into, the next millennium in the face of the following changes:

Demographic development will reduce the normal replenishment of the adult labour force at around 2.5 per cent annually to alarmingly low levels – 1.5-1.9 per cent annually – throughout the 1990s, in almost all Member countries.

Despite the fall in general levels of unemployment in the OECD since 1988, the continuation of unacceptably *high unemployment* in many regions and amongst many groups risks excluding them.

Structural change and technological development have an accelerating impact on products as well as on production and how it is organised, marketed and distributed. (In addition, more jobs are now being created in services and information than in production.) These changes confront our societies with several far-reaching challenges. We must prepare our young people for a profoundly better understanding of, and insight into, the emerging and new technologies – and motivate them to master these in all aspects of our lives so as to ensure that technological change contributes its maximum to economic development and

does not counteract social progress. At the same time we must be aware of the environmental challenges associated with this process. We must develop new competence in the present adult labour force on an unprecedentedly massive scale. Businesses must respond flexibly to changes. And we must increase the continuous development and reform of our industrial production and its work organisation. This challenge, if successfully managed, should lead to both economic and social gain.

The already manifested *increase in competition* on the world market – following from the rapid increase in world trade, accelerating technological development becoming increasingly accessible to all, and changing political and economic parameters – will in all probability increase even further through the 1990s. Another kind of competitive challenge altogether is that following from the enormous needs of the emerging new market economies and democracies of Eastern Europe to receive assistance through the difficult and unstable transition period that may well stretch through the whole decade of the nineties.

The necessary response

These challenges require a threefold response in order to ensure that the OECD countries' human resources meet the challenge:

Investment in education and training

Those countries and firms who will succeed best in the international competitive environment will be those which treat education and training of the young generation and the development of the skills of adults already in the labour force as an investment and not as a cost. However, it should be said that investment in education and training is a necessary condition for success, not a panacea which can put right other economic or social policy failures. Moreover, basic education must provide young people with the competence and understanding necessary for their individual enhancement, their social integration and responsibility as well as their employability. The basis for this is that young people must be given the means to successfully cope with a rapidly changing labour market and society. Continuing curricular reform and equal opportunities for both sexes are essential. The education systems can be a cement of social cohesion through OECD countries which itself is a key factor in economic development.

Enterprises depend heavily on the performance of the education system. This is particularly the case for the smaller companies which have relatively smaller chances to train and retrain their staffs themselves, and generally can afford less investment in raising the competence of their workforce. This last fact is mainly due to the time-scale involved before such investments pay off. In order to make these smaller enterprises more competitive and to increase the opportunities available to their staffs, incentives schemes and other "outside" support arrangements attractive to both sides should be investigated and discussed.

The performance of public youth education and training systems

Progress has taken place over the last ten years. However, it is unacceptable to the social partners that a best possible level of educational attainment is not achieved. Most systems succeed to raise at best less than 80 per cent of each cohort to the desired standards (with the exception of Japan). Although measured standards may be misleading, this deprives both large groups of our young and the economy of the necessary prerequisites for active participation of all in the development of our societies. Our joint strategy calls for a "total quality" basic education for all young for which our governments must be responsible and their respective school systems must be accountable. Governments must provide the necessary financial resources (when efficiently deployed) to allow "total quality" in education. The OECD has an important role to play in helping to extend good practice in this field.

The need for educating and retraining the adult labour force

More than 80 per cent of the workforce of the year 2000 is already at work and this adult workforce will thus comprise an increasing part of the labour force available to us into the next century. In many OECD countries a large part of this workforce left school with only the minimum school qualifications

and the large majority do not receive systematic adult education or retraining. These circumstances are compounding the other problems which we are facing. This situation can no longer be tolerated and must be put right over the 1990s. Continuing education and retraining must be made accessible and attractive to adults. OECD governments must take the prime responsibility in reversing this situation and employers and trade unions are themselves committed to assisting them in meeting this objective.

Improving basic education

In the face of organisational and structural change, the nature of work is changing at an accelerating pace. Mass production and Taylorist systems of production are giving way in some industries to new forms of work organisation. If new technologies are to be exploited to the full, both economically and socially, this process of change in work organisation will increase and spread. At the same time, structural changes mean that individual workers are faced by fundamental changes during their working lives. This change in the world of work produces changes in the requirements on our education systems. The increasing need for ability to handle information, numeracy, group work, the ability to communicate, literacy, inter-personal skills and customer-related skills will all require education systems and curricula which reflect the need for young people to learn and not just absorb knowledge and to be able to adapt to and profit from future changes. The basic education system has increasingly to provide for the capacity and re-engage in the learning process itself.

This will put increased pressure on the school systems to adapt and to be seen as being more at the cutting edge of change. Indicators of inadequate system performance such as increasing functional illiteracy and persistently high drop-out rates suggest that in many OECD countries the position has become very serious. More optimal use of resources and in some cases extra public resources are necessary, but at the same time there must be active co-operation between schools and the world of work and public authorities – both to ensure that adaptation of systems take place and to make better use of the capacity and interest of enterprises to assist schools to create motivation and generate learning opportunities. Schools are not factories and learning environments have to be built up, not imposed. Alongside education for employment, schools also have to ensure education for individual enhancement and social responsibility.

Future societies and economies will not be able to function if high quality education is focused on a small group. This is why a "total quality" approach to education is necessary. We have as our ambition the elimination of the drop-out phenomenon as well as the overall raising of standards.

In achieving all these improvements the quality and morale of the teaching profession is the key. We endorse the conclusions of the report of the OECD's Working Party on the Condition of Teaching – *The Teacher Today* (OECD, Paris, 1990) – that in many cases the conditions and rewards of the teaching profession must be improved as an urgent priority and that opportunities for regular retraining of teachers is necessary in order to improve the quality of teaching.

Changes must also take place in systems of higher education. We must give an increased opportunity for the higher education of young people as well as increased flexibility in making these institutions available for supporting the continuous development of adults active in all avenues of working life. Higher education institutions should be encouraged to consider the potential for adult vocational training in their traditionally "academic" curricula in order to increase their accessibility to adults.

Modernising basic training

Many OECD Member States need to improve their systems of vocational education so that young people leaving the compulsory school system have an opportunity for a higher education place or training opportunity which leads to a certifiable qualification. There is no one model for the desirable balance or the type of system which should be preferable. But close co-operation between the three partners – government authorities, employers and trade unions – is essential. Information on successful examples – whether industry- or community-based – should be used more actively.

In some cases there are imbalances between the "education" and the "training" establishments which need to be redressed. In other countries, initial vocational training and apprenticeship systems have broken down to a worrying degree. In all countries, however, there are problems of insufficient levels of basic training, mismatches between the skills produced and those required, and growing gaps in opportunity. Although the exact delivery of vocational training systems may vary, public authorities have a responsibility for ensuring the study and operation of the system and each young person must have a right to such training. Public authorities, in close co-operation with the social partners, must also ensure that vocational training leads to a set of certifiable skills and qualifications.

Retraining throughout working life

There must, however, be a sustained effort at retraining the adult labour force and to a large extent this must be enterprise-based. At the moment, this is often insufficient both due to the changing environment of the 1990s and due to the long-standing tendency for individual firms to under-invest in training for fear that skilled workers will be "poached" by other employers. This also leads to the tendency to focus on narrow job-based training rather than focusing on wider transferable skills of use to different employers. The ultimate response must be to upgrade the level of competence of the adult.

Especially, the smaller enterprises are hard put to invest sufficiently in training, and to provide comprehensive enough training schemes, for obvious reasons. These companies need more outside assistance, both from their own organisations, from schools and universities, and from governments and banks, to overcome these difficulties and limitations.

In most Member countries, the rapid expansion of education and training in the last decades has inadvertently resulted in increasing inequalities as regards the distribution of education between generations, most younger workers having received almost twice as much schooling as their older colleagues. This is further compounded when production priorities act to allocate more continuing training and retraining resources to those workers who are already best educated. Also, various jobs require different amounts of upgrading. However, to compensate for such circumstances cannot be regarded as being solely a responsibility for employers – rather, there must be a tripartite response.

There are community-wide interests in this process and therefore governments must take a responsibility in both the orientation of the content and the funding. The responsibility for financing must depend upon the respective goals of the training, its immediate employment objectives, its wide social needs and its individual enhancement. The field of enterprise-based training and retraining does, however, represent a perfect field for a "win-win" strategy of co-operation between the social partners and government, taking account of national circumstances, in which all parties gain and conflicts can be reconciled.

Enterprise-based training is therefore having to:

- take on responsibilities for remedial education;
- provide sufficiently wide skills that the workforce is adaptable and polyvalent;
- whenever possible provide an opportunity for individual development, as well as training becoming a standard part of working conditions for all workers.

These demands on what enterprise-based training must achieve lead to the need for a three-dimensional model that explains both how to increase the personal competence, the social competence and the professional competence – and how to distribute and balance responsibility for these partly converging, partly divergent ambitions. Also, it calls for new and more versatile methods of co-operation between all "players", such as incentive and various fiscal/financial options made available under specified conditions.

In some countries, collective agreements have also been concluded establishing good practice for enterprise-based training. In some instances paid training leave has become an established practice. Training leave may become increasingly important in the future. It should be combined with mechanisms that constructively govern its deployment to times and purposes that are beneficial also to others of the

"players". Systems of personal "accounts" for training (or drawing rights) combined with incentives should be examined.

In almost all countries, however, serious gaps exist in training provision by small and medium-size enterprises. Other areas requiring specific government programmes are those of particular underprivileged groups who may require targeted programmes, such as those trapped in unskilled poor quality jobs or the long-term unemployed. A further area is those industries or sectors facing massive restructuring, where anticipatory retraining programmes can help ease adaptation and change.

Making it happen

BIAC and TUAC are ready to engage in a joint effort with OECD to encourage governments to increase general awareness in all circles concerned of the critical importance of the quality of the labour force to economic growth and performance. We hope to increase the opportunities to individual workers, both through incentives and new responsibilities to further their skill development. The goals are:

- improving the general school system through a "total quality approach" to basic education;
- the development of a high quality vocational education system leading to certifiable qualifications with the greatest possible access for all;
- increased opportunity for young people to go forward to further and higher education;
- the development of enterprise-based training;
- the promotion of retraining for workers throughout their working life.

Our objective is to increase the options available to individuals throughout their lives as well as meeting the economic and social challenges facing us. Opportunity must be given for skill development, incentives must exist to make this worthwhile to the individual and therefore changes also have implications for collective bargaining and pay systems.

A new "win-win" strategy of co-operation must be developed between all parties concerned both in youth education and training and in the development of the potential of the adult labour force – governments, social partners and above all individuals involved.

It is recognised that there are absolute limits to both financial resources and time. In the same manner that the goals of training and retraining have objectives for the employer, society as a whole and the individual, so financing responsibilities must reflect the different objectives – individual, corporate and collective. Similarly, opportunities for using working time for retraining, the provision of training leave and the general reduction of working time are elements which have to be balanced.

Ultimately, however, both financing and use of time for training must be treated as an investment. Action by government at the right time can ensure that the investment is brought forward. Indeed for many individuals and small companies, action by the government is the key to enabling them to participate in this process in any way at all, since their immediate perspectives and potential seldom allow them to have longer-term or more comprehensive ambitions.

The profile of training needs to be raised both at the level of the board-room and within workplaces. In many cases it has been included on the collective bargaining agenda, and at the same time is an appropriate subject for consultation and co-operation arrangements. The ultimate goal is to increase individual opportunities, avoid exclusion and match both economic and social needs.

The suggestions and reflections brought forward in this statement call for education and training to be at the centre of OECD's and its Member governments' priorities. BIAC and TUAC will work to this end and also seek to ensure the close interaction of Education and Training Policies with other priorities such as Economic, Manpower and Social Affairs and other policies. We are quite prepared to continue and if necessary increase our co-operation with OECD, its Secretariat and the CERI, in present and future forms.

NOTES AND REFERENCES

1. The United States Council for International Business disassociates itself from this statement.
2. "Full Employment and Growth as the Social and Economic Goal", BIAC and TUAC, Paris, 1986.
3. *Education and the Economy in a Changing Society*, OECD, Paris, 1989.

Annex 2

HEADS OF DELEGATIONS

Chairman	Mr. Javier SOLANA MADARIAGA Minister of Education and Science (Spain)
Vice-Chairmen	Mr. Lauro F. CAVAZOS (United States)
	Mr. Göran PERSSON (Sweden)
Australia	Mr. G. TAYLOR Secretary of State Department of Employment, Education, and Training
Austria	Mrs. Hilde HAWLICEK Federal Minister for Education, Arts and Sports
Belgium	Mr. Daniel COENS Minister of Education (Dutch-speaking sector)
Canada	The Honourable Russell H. KING Minister of Higher Education and Training, New Brunswick
	The Honourable Bruce STRACHAN Minister of Higher Education, Training and Technology, British Columbia
Denmark	Mr. Bertel HAARDER Minister of Education and Research
Finland	Mr. Ole NORRBACK Minister of Education
France	Mr. Robert CHAPUIS Secretary of State for Technical Education Ministry of National Education
Germany	Dr. Norbert LAMMERT Parliamentary Secretary of State Federal Ministry of Education and Science
Greece	Mr. Vassilis KONTOGIANNOPOULOS Minister of Education
Iceland	Mr. Svavar GESTSSON Minister of Education and Culture

Ireland	Mr. Noel LINDSAY Secretary of State Department of Education
Italy	M. Gerardo BIANCO Minister of Education
Japan	Mr. Isao AMAGI Special Adviser to the Minister of Education
Luxembourg	Mr. Marc FISCHBACH Minister of Education
Netherlands	Prof. Dr. J.M.M. RITZEN Minister of Education and Science
New Zealand	Ms. Penny FENWICK Group Manager, Policy Group, Ministry of Education
Norway	Mr. Gudmund HERNES Minister of Education, Research and Ecclesiastical Affairs
Portugal	Mr. Pedro d'OREY DA CUNHA Secretary of State for Educational Reform Ministry of Education
Spain	Mr. Javier SOLANA MADARIAGA Minister of Education and Science Mr. Francisco Javier MATIA PRIM Under-Secretary for Education and Science
Sweden	Mr. Göran PERSSON Minister of Education and Cultural Affairs for Primary, Secondary and Adult Education
Switzerland	M. Jean CAVADINI States' Counsellor President of the Swiss Conference of Cantonal Directors for Public Instruction
Turkey	Mr. Hamdi BINAY Deputy Under-Secretary of the Ministry of National Education
United Kingdom	Mr. Alan HOWARTH Parliamentary Under-Secretary of State Department of Education and Science
United States	The Honourable Lauro F. CAVAZOS Secretary for Education
Yugoslavia	Mr. Slavo RADOSEVIC Under-Secretary in the Federal Secretariat for Development
CEC	Mr. R. PHAN VAN PHI Ambassador, Permanent Representative to the OECD
European Free Trade Association (EFTA)	Ms. Ann-Sofi LINDENBAUM Officer, Specific Integration Affairs

OBSERVERS

Council of Europe	Mr. Simon NEWMAN Secretary to the Education Committee attached to the Council for Cultural Co-operation
UNESCO	Mr. Colin N. POWER *Deputy Director-General for Education*

MAIN SALES OUTLETS OF OECD PUBLICATIONS
PRINCIPAUX POINTS DE VENTE DES PUBLICATIONS DE L'OCDE

ARGENTINA – ARGENTINE
Carlos Hirsch S.R.L.
Galeria Guemes, Florida 165, 4° Piso
1333 Buenos Aires Tel: (1) 331.1787 y 331.2391
Telefax: (1) 331.1787

AUSTRALIA – AUSTRALIE
D.A. Book (Aust.) Pty. Ltd.
648 Whitehorse Road, P.O.B. 163
Mitcham, Victoria 3132 Tel: (03) 873.4411
Telefax: (03) 873.5679

AUSTRIA – AUTRICHE
Gerold & Co.
Graben 31
Wien I Tel: (0222) 533.50.14

BELGIUM – BELGIQUE
Jean De Lannoy
Avenue du Roi 202
B-1060 Bruxelles Tel: (02) 538.51.69/538.08.41
Telefax: (02) 538.08.41

CANADA
Renouf Publishing Company Ltd.
1294 Algoma Road
Ottawa, ON K1B 3W8 Tel: (613) 741.4333
Telefax: (613) 741.5439

Stores:
61 Sparks Street
Ottawa, ON K1P 5R1 Tel: (613) 238.8985
211 Yonge Street
Toronto, ON M5B 1M4 Tel: (416) 363.3171

Les Éditions La Liberté Inc.
3020 Chemin Sainte-Foy
Sainte-Foy, PQ G1X 3V6 Tel: (418) 658.3763
Telefax: (418) 658.3763

Federal Publications
165 University Avenue
Toronto, ON M5H 3B8 Tel: (416) 581.1552
Telefax: (416) 581.1743

CHINA – CHINE
China National Publications Import
Export Corporation (CNPIEC)
16 Gongti E. Road, Chaoyang District
P.O. Box 88 or 50
Beijing 100704 PR Tel: (01) 506.6688
Telefax: (01) 506.3101

DENMARK – DANEMARK
Munksgaard Export and Subscription Service
35, Nørre Søgade, P.O. Box 2148
DK-1016 København K Tel: (33) 12.85.70
Telefax: (33) 12.93.87

FINLAND – FINLANDE
Akateeminen Kirjakauppa
Keskuskatu 1, P.O. Box 128
00100 Helsinki Tel: (358 0) 12141
Telefax: (358 0) 121 4441

FRANCE
OECD/OCDE
Mail Orders/Commandes par correspondance:
2, rue André-Pascal
75775 Paris Cedex 16 Tel: (33-1) 45.24.82.00
Telefax: (33-1) 45.24.85.00 or (33-1) 45.24.81.76
Telex: 640048 OCDE

OECD Bookshop/Librairie de l'OCDE:
33, rue Octave-Feuillet
75016 Paris Tel: (33-1) 45.24.81.67
(33-1) 45.24.81.81

Documentation Française
29, quai Voltaire
75007 Paris Tel: 40.15.70.00

Gibert Jeune (Droit-Économie)
6, place Saint-Michel
75006 Paris Tel: 43.25.91.19

Librairie du Commerce International
10, avenue d'Iéna
75016 Paris Tel: 40.73.34.60

Librairie Dunod
Université Paris-Dauphine
Place du Maréchal de Lattre de Tassigny
75016 Paris Tel: 47.27.18.56

Librairie Lavoisier
11, rue Lavoisier
75008 Paris Tel: 42.65.39.95

Librairie L.G.D.J. - Montchrestien
20, rue Soufflot
75005 Paris Tel: 46.33.89.85

Librairie des Sciences Politiques
30, rue Saint-Guillaume
75007 Paris Tel: 45.48.36.02

P.U.F.
49, boulevard Saint-Michel
75005 Paris Tel: 43.25.83.40

Librairie de l'Université
12a, rue Nazareth
13100 Aix-en-Provence Tel: (16) 42.26.18.08

Documentation Française
165, rue Garibaldi
69003 Lyon Tel: (16) 78.63.32.23

Librairie Decitre
29, place Bellecour
69002 Lyon Tel: (16) 72.40.54.54

GERMANY – ALLEMAGNE
OECD Publications and Information Centre
Schedestrasse 7
D-W-5300 Bonn 1 Tel: (0228) 21.60.45
Telefax: (0228) 26.11.04

GREECE – GRÈCE
Librairie Kauffmann
Mavrokordatou 9
106 78 Athens Tel: 322.21.60
Telefax: 363.39.67

HONG-KONG
Swindon Book Co. Ltd.
13-15 Lock Road
Kowloon, Hong Kong Tel: 366.80.31
Telefax: 739.49.75

ICELAND – ISLANDE
Mal Mog Menning
Laugavegi 18, Postholf 392
121 Reykjavik Tel: 162.35.23

INDIA – INDE
Oxford Book and Stationery Co.
Scindia House
New Delhi 110001 Tel: (11) 331.5896/5308
Telefax: (11) 332.5993

17 Park Street
Calcutta 700016 Tel: 240832

INDONESIA – INDONÉSIE
Pdii-Lipi
P.O. Box 269/JKSMG/88
Jakarta 12790 Tel: 583467
Telex: 62 875

IRELAND – IRLANDE
TDC Publishers - Library Suppliers
12 North Frederick Street
Dublin 1 Tel: 74.48.35/74.96.77
Telefax: 74.84.16

ISRAEL
Electronic Publications only
Publications électroniques seulement
Sophist Systems Ltd.
71 Allenby Street
Tel-Aviv 65134 Tel: 3-29.00.21
Telefax: 3-29.92.39

ITALY – ITALIE
Libreria Commissionaria Sansoni
Via Duca di Calabria 1/1
50125 Firenze Tel: (055) 64.54.15
Telefax: (055) 64.12.57

Via Bartolini 29
20155 Milano Tel: (02) 36.50.83

Editrice e Libreria Herder
Piazza Montecitorio 120
00186 Roma Tel: 679.46.28
Telefax: 678.47.51

Libreria Hoepli
Via Hoepli 5
20121 Milano Tel: (02) 86.54.46
Telefax: (02) 805.28.86

Libreria Scientifica
Dott. Lucio de Biasio 'Aeiou'
Via Coronelli, 6
20146 Milano Tel: (02) 48.95.45.52
Telefax: (02) 48.95.45.48

JAPAN – JAPON
OECD Publications and Information Centre
Landic Akasaka Building
2-3-4 Akasaka, Minato-ku
Tokyo 107 Tel: (81 3) 3586.2016
Telefax: (81 3) 3584.7929

KOREA – CORÉE
Kyobo Book Centre Co. Ltd.
P.O. Box 1658, Kwang Hwa Moon
Seoul Tel: 730.78.91
Telefax: 735.00.30

MALAYSIA – MALAISIE
Co-operative Bookshop Ltd.
University of Malaya
P.O. Box 1127, Jalan Pantai Baru
59700 Kuala Lumpur
Malaysia Tel: 756.5000/756.5425
Telefax: 757.3661

NETHERLANDS – PAYS-BAS
SDU Uitgeverij
Christoffel Plantijnstraat 2
Postbus 20014
2500 EA's-Gravenhage Tel: (070 3) 78.99.11
Voor bestellingen: Tel: (070 3) 78.98.80
Telefax: (070 3) 47.63.51

NEW ZEALAND
NOUVELLE-ZÉLANDE
Legislation Services
P.O. Box 12418
Thorndon, Wellington Tel: (04) 496.5652
Telefax: (04) 496.5698

NORWAY – NORVÈGE
Narvesen Info Center - NIC
Bertrand Narvesens vei 2
P.O. Box 6125 Etterstad
0602 Oslo 6 Tel: (02) 57.33.00
Telefax: (02) 68.19.01

PAKISTAN
Mirza Book Agency
65 Shahrah Quaid-E-Azam
Lahore 3 Tel: 66.839
Telex: 44886 UBL PK Attn: MIRZA BK

PORTUGAL
Livraria Portugal
Rua do Carmo 70-74
Apart. 2681
1117 Lisboa Codex Tel: (01) 347.49.82/3/4/5
Telefax: (01) 347.02.64

BEST COPY AVAILABLE

SINGAPORE – SINGAPOUR
Information Publications Pte. Ltd.
41, Kallang Pudding, No. 04-03
Singapore 1334 Tel. 741 5166
Telefax: 742 9356

SPAIN – ESPAGNE
Mundi-Prensa Libros S.A.
Castelló 37, Apartado 1223
Madrid 28001 Tel. (91) 431.33.99
Telefax: (91) 575.39.98

Libreria Internacional AEDOS
Consejo de Ciento 391
08009 – Barcelona Tel. (93) 488.34.92
Telefax: (93) 487.76.59

Llibreria de la Generalitat
Palau Moja
Rambla dels Estudis, 118
08002 – Barcelona
(Subscripcions) Tel. (93) 318.80.12
(Publicacions) Tel. (93) 302.67.23
Telefax: (93) 412.18.54

SRI LANKA
Centre for Policy Research
c/o Colombo Agencies Ltd.
No. 300-304, Galle Road
Colombo 3 Tel. (1) 574240, 573551-2
Telefax: (1) 575394, 510711

SWEDEN – SUÈDE
Fritzes Fackboksföretaget
Box 16356
Regeringsgatan 12
103 27 Stockholm Tel. (08) 23.89.00
Telefax: (08) 20.50.21

Subscription Agency-Agence d'abonnements
Wennergren-Williams AB
Nordenflychtsvägen 74
Box 30004
104 25 Stockholm Tel. (08) 13.67.00
Telefax: (08) 618.62.36

SWITZERLAND – SUISSE
Maditec S.A. (Books and Periodicals - Livres et périodiques)
Chemin des Palettes 4
1020 Renens/Lausanne Tel. (021) 635.08.65
Telefax: (021) 635.07.80

Librairie Payot
Service des Publications Internationales
Case postale 3212
1002 Lausanne Tel. (021) 341.33.48
Telefax: (021) 341.33.45

Librairie Unilivres
6, rue de Candolle
1205 Genève Tel. (022) 320.26.23
Telefax: (022) 329.73.18

Subscription Agency - Agence d'abonnement
Naville S.A.
38 avenue Vibert
1227 Carouge Tél. (022) 308.05.56/57
Telefax: (022) 308.05.88

See also – Voir aussi:
OECD Publications and Information Centre
Schedestrasse 7
D-W 5300 Bonn 1 (Germany)
Tel. (49.228) 21.60.45
Telefax: (49.228) 26.11.04

TAIWAN – FORMOSE
Good Faith Worldwide Int'l. Co. Ltd.
9th Floor, No. 118, Sec. 2
Chung Hsiao E. Road
Taipei Tel. (02) 391.7396/391.7397
Telefax: (02) 394.9176

THAILAND – THAÏLANDE
Suksit Siam Co. Ltd.
113, 115 Fuang Nakhon Rd.
Opp. Wat Rajbopith
Bangkok 10200 Tel. (662) 251.1630
Telefax: (662) 236.7783

TURKEY – TURQUIE
Kültur Yayinlari Is-Turk Ltd. Sti.
Ataturk Bulvari No. 191/Kat. 13
Kavaklidere/Ankara Tel. 428.11.40 Ext. 2458
Dolmabahce Cad. No. 29
Besiktas/Istanbul Tel. 160.71.88
Telex: 43482B

UNITED KINGDOM – ROYAUME-UNI
HMSO
Gen. enquiries Tel. (071) 873 0011
Postal orders only:
P.O. Box 276, London SW8 5DT
Personal Callers HMSO Bookshop
49 High Holborn, London WC1V 6HB
Telefax: (071) 873 8200
Branches at: Belfast, Birmingham, Bristol, Edinburgh, Manchester

UNITED STATES – ÉTATS-UNIS
OECD Publications and Information Centre
2001 L Street N.W., Suite 700
Washington, D.C. 20036-4910 Tel. (202) 785.6323
Telefax: (202) 785.0350

VENEZUELA
Libreria del Este
Avda F. Miranda 52, Aptdo. 60337
Edificio Galipán
Caracas 106 Tel. 951.1705/951.2307/951.1297
Telegram: Libreste Caracas

Subscription to OECD periodicals may also be placed through main subscription agencies.

Les abonnements aux publications périodiques de l'OCDE peuvent être souscrits auprès des principales agences d'abonnement.

Orders and inquiries from countries where Distributors have not yet been appointed should be sent to: OECD Publications Service, 2 rue André-Pascal, 75775 Paris Cedex 16, France.

Les commandes provenant de pays où l'OCDE n'a pas encore désigné de distributeur devraient être adressées à : OCDE, Service des Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

10-1992

OECD PUBLICATIONS, 2 rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(91 92 03 1) ISBN 92-64-13778-5 - No. 45807 1992

151 BEST COPY AVAILABLE

HIGH-QUALITY EDUCATION AND TRAINING FOR ALL

Widespread and effective access to education is a necessary condition for active participation in our countries. "High-quality Education and Training for All", the theme of the Conference that brought together the OECD Ministers of Education, shows the scale and the nature of the challenges facing education.

The Ministers' discussions and conclusions are presented in this volume, and so is a general analysis by the Secretariat. The need for an integrated approach is stressed: only analysis and actions joining education and economic and societal problems can provide viable answers. This volume emphasizes the key role played by learning, not only in personal and cultural development but also for economic and social well-being.

A statistical overview of developments in the education, labour market and demographic fields, drawing on the most recent data available, is also included.

With 9 tables and 84 graphs.

15